Origination Date: 10-15-2016

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Living up to our name.

Contaminated Soil Management Plan

Prepared by
Environmental Services Division of Public Works

SECTION 1 – GENERAL INFORMATION

1.1 PURPOSE

The purpose of this document is to provide all regulatory information related to management and disposal of contaminated sediment unearthed during construction of the Main Plant Pump Replacement with Controls Project.

1.2 BACKGROUND

The City of Superior Environmental Services Division (ESD) awarded a contract to Lakehead Constructors Inc., 2916 Hill Ave., Superior, WI, 54880 to replace the main wastewater pumps. They were also to install new piping and controls to facilitate pumping excess flows to the Combined Sewage Treatment Plant eliminating the need to rely on gravity, increasing our ability to treat high flows more effectively. Actively pumping water between the two facilities enables the City to maintain lower levels in the collection system, therefore reducing the risk of sanitary sewer overflows or water in basements.

During the excavation of soil around the perimeter of the Screening Building, Lakehead Constructors staff exposed several construction related materials, including old bricks, pipes, lime pockets, and several sections of concrete, including an old vault that was assumed to have been replaced but instead was filled in with soil. There was also the layer of what we assume is fly ash that was exposed between the Main Plant Screen Building and the Main Plant Pump Station. The layer was around 2' thick. There appeared to be good clean material both above and below the fly ash layer.

However, they also discovered a dark layer of contaminated sediment with a distinct petroleum odor. City of Superior staff was immediately notified and arranged to bring samples of the contaminated sediment to a local lab for Diesel Range Organics analysis.

As the City was aware of the plume of underground contamination resulting from a former manufactured gas plant owned by Superior Water Light and Power (SWLP), BRRT # 02-16-275446, an invitation was extended to them to visit the site and view the contamination first hand. SWL&P notified their consultant Bill Gregg of Summit Envirosolutions, Inc. Bill in turn notified Jamie Dunn, Wisconsin Dept. of Natural Resources (WDNR).

Dave Weber (SWL&P), Bill Gregg, and Jamie Dunn met with Diane Nelson, Mark Unger, and Jon Shamla (ESD staff) at the excavation site. An operator from Lakehead dug down to expose an area of contamination that had been recently filled in. Contamination was visible and a petroleum odor was evident.

Jamie Dunn informed the City of the following:

- A *Management of Contaminated Soil Plan* would need to be approved before any soil can be removed from the site.
- No contaminated soil can be replaced on site as the site is considered a filled in lakebed.
- The soil would not be classified as hazardous and could be disposed of in the Superior Landfill if the landfill requirements are met for both contaminant levels and flash point.
- Regulations relating to the soil cleanup standards and the required plan can be found in NR 718 and NR 720.

This plan was developed to satisfy these requirements.

SECTION 2 – SITE SPECIFIC INFORMATION

2.1. SITE LOCATION AND OWNERSHIP

The Environmental Services Division of Public Works for the City of Superior owns and operates the Superior Wastewater Treatment Facility at 51 E 1st Street, Superior Wisconsin. The facility ID number is 39-6005361.

The legal description from the Douglas County website is as follows:

PARCEL 02-802-07102-00 - DOCK PROPERTY BEG AT A POINT IN NE'LY LINE OF WATER ST ROYS ADD TO SUP CITY 130 FT SE'LY FROM THE CORNER FORMED BY THE INTERSECTION OF THE S'LY LINE OF C ST WITH NE'LY LINE OF WATER ST, THENCE SE'LY ALONG NE'LY LINE OF WATER ST TO ITS INTERSECTION WITH S'LY LINE OF E ST IN SAID ROYS ADDN, THENCE SW'LY ALONG SAID S'LY LINE OF E ST TO NE'LY LINE OF BAY ST IN SAID ROYS ADDN, THENCE SE'LY ALONG SAID NE'LY LINE OF BAY ST ABOUT 216 FT (516 FT?) TO A POINT WHICH IS THE CENTER OF THE SW'LY END OF LOT 3 BL 11 SUPR CITY, THENCE NE'LY AT RIGHT ANGLES TO NE'LY LINE OF BAY ST TO A POINT DISTANT 60 FT SW'LY FROM N P R/W, THENCE NW'LY IN A STRAIGHT LINE TO A POINT IN THE SW'LY LINE OF R/W OF SAID N P RY CO WHICH POINT IS 440 FT NW'LY FROM THE N & S CENTERLINE OF SAID LOT 3 BL 11, THENCE SE'LY ALONG SW'LY LINE OF SAID R/W 440 FT TO SAID N & S CENTERLINE OF SAID LOT 3 BL 11, THENCE NE'LY AT RIGHT ANGLES TO NE'LY LINE OF SAID BAY ST TO THE ESTABLISHED DOCK LINE IN BAY OF SUP, THENCE NW'LY ALONG SAID ESTABLISHED DOCK LINE TO A POINT 130 FT SE'LY FROM SE'LY LINE OF C ST ROYS ADDN PRODUCED MEASURED AT RT ANGLES TO SAID PRODUCED LINE, THENCE SW'LY AT RT ANGLES TO NE'LY LINE OF WATER ST TO BEG, SUBJ TO N P R/W & SO CALLED CONAN SLIP AGREEMENT DATED MARCH 31, 1896 SUBJ TO F ST DEDICATED 5/9/1922 EXC THAT PART RECORDED IN 265-315 AND 385-277, AND EXC PART CONV IN VOL 400 PAGES 636,637 & 638, AND EXC PART CONV IN #829763/#828798 (PCL 2-05928). SAID PARCEL CONTAINS 37.998 AC M/L.

PARCEL 02-802-07101-00 - LAND PART OF GOVT LOT 2 SEC 13 TP 49 R 14 BEG AT A POINT ON THE NE'LY LINE OF WATER ST ROYS ADD TO SUP CITY 130 FT SE'LY FROM THE CORNER FORMED BY THE INTERSECTION OF THE SE'LY LINE OF C ST WITH NE'LY LINE OF WATER ST,THENCE ON A LINE PARALLEL WITH SE'LY LINE OF C ST PRODUCED TO THE ESTABLISHED DOCK LINE IN THE BAY OF SUP, THENCE NW ALONG SAID DOCK LINE 300 FT, THENCE SW'LY ON A LINE PARALLEL WITH SE'LY LINE OF C ST PRODUCED TO NE'LY LINE OF WATER ST, THENCE SE'LY ALONG NE'LY LINE OF SAID WATER ST TO BEG, EXCEPT NP R/W & SUBJ TO SLIP AGREEMENT VOL 2 OF AGREEMENTS PAGE 242, EXC PART CONV 230D235 67-11 333-505

See Figure 1 for an aerial image of the entire facility. Coordinates are: 46.727185, -92.072395.

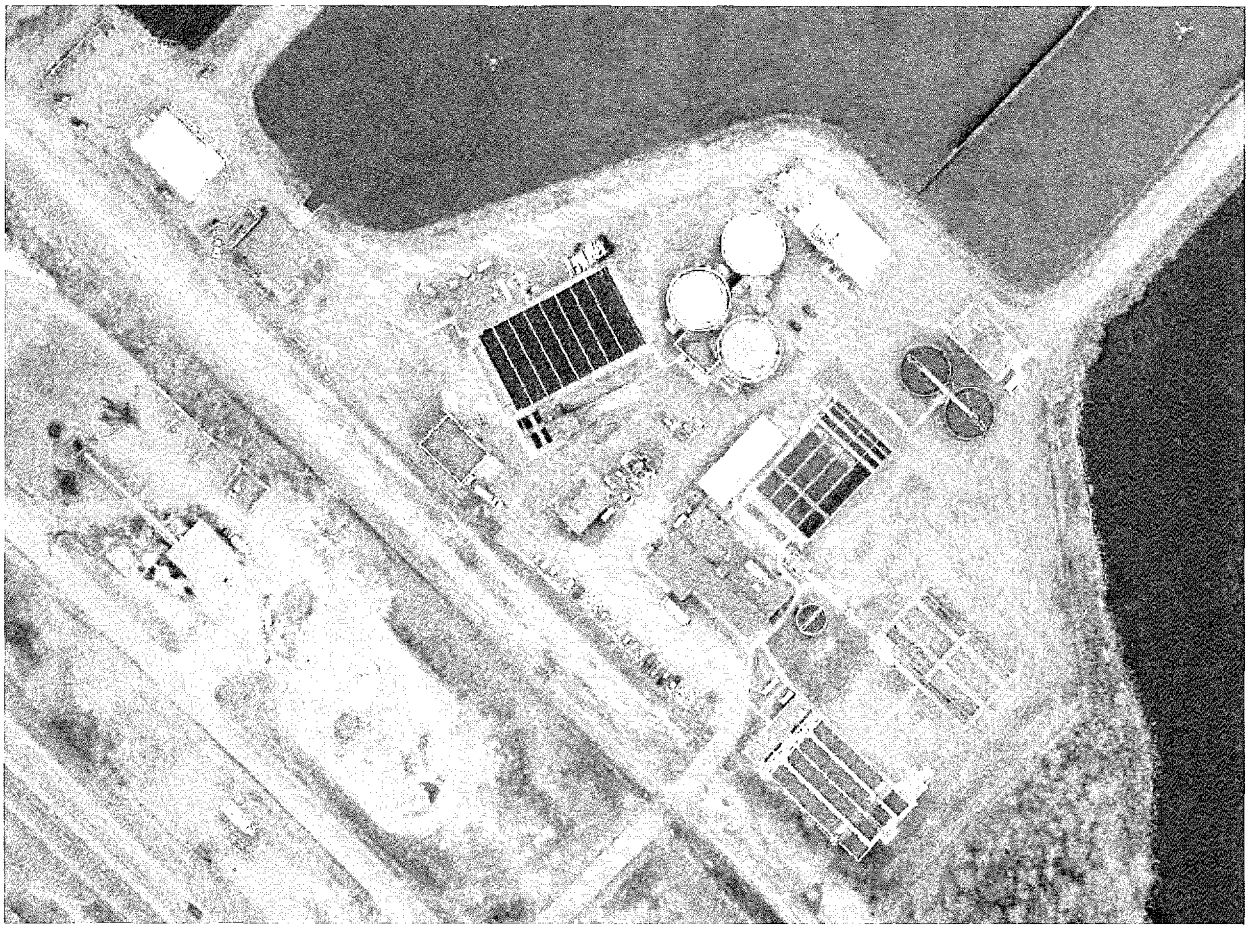

Figure 1 City of Superior Wastewater Treatment Facility

2.2. ESD CONTACT INFORMATION

Steve Roberts, Environmental Services Director	robertss@ci.superior.wi.us	715-394-0392
Jon Shamla, Wastewater Ops & Eng. Manager	shamlaj@ci.superior.wi.us	715-395-5822
Mark Unger, Facilities Planning Coordinator	ungerm@ci.superior.wi.us	715-395-5838
Diane Nelson, Stormwater & Admin Manager	nelsond@ci.superior.wi.us	715-395-5826

2.3. REQUEST TYPE

The NR Code 718.12 (1) and (2) allows for an exemption from state solid waste laws for contaminated soil. This plan is submitted as a requirement of this exemption.

2.4. DISPOSAL SITE

The disposal site will be the City of Superior Municipal Sanitary Landfill, DNR License #2627. The Superior Moccasin Mike Landfill (Site) is located in the S ½ of the NW ¼ and the N ½ of the SW ¼, Section 2, Township 28 North, Range 31 West, Douglas County, Wisconsin. The Site is located within the limits of the City of Superior, approximately 6 miles southeast of the Wastewater Treatment Facility. A Generator's Waste Profile and a Generator's Analytical Certification Form have been submitted to Darienne McNamara, Landfill Manager and she has approved the disposal of the contaminated soils at the Site.

Public Works Dept
1316 N 14TH ST
Superior WI 54880

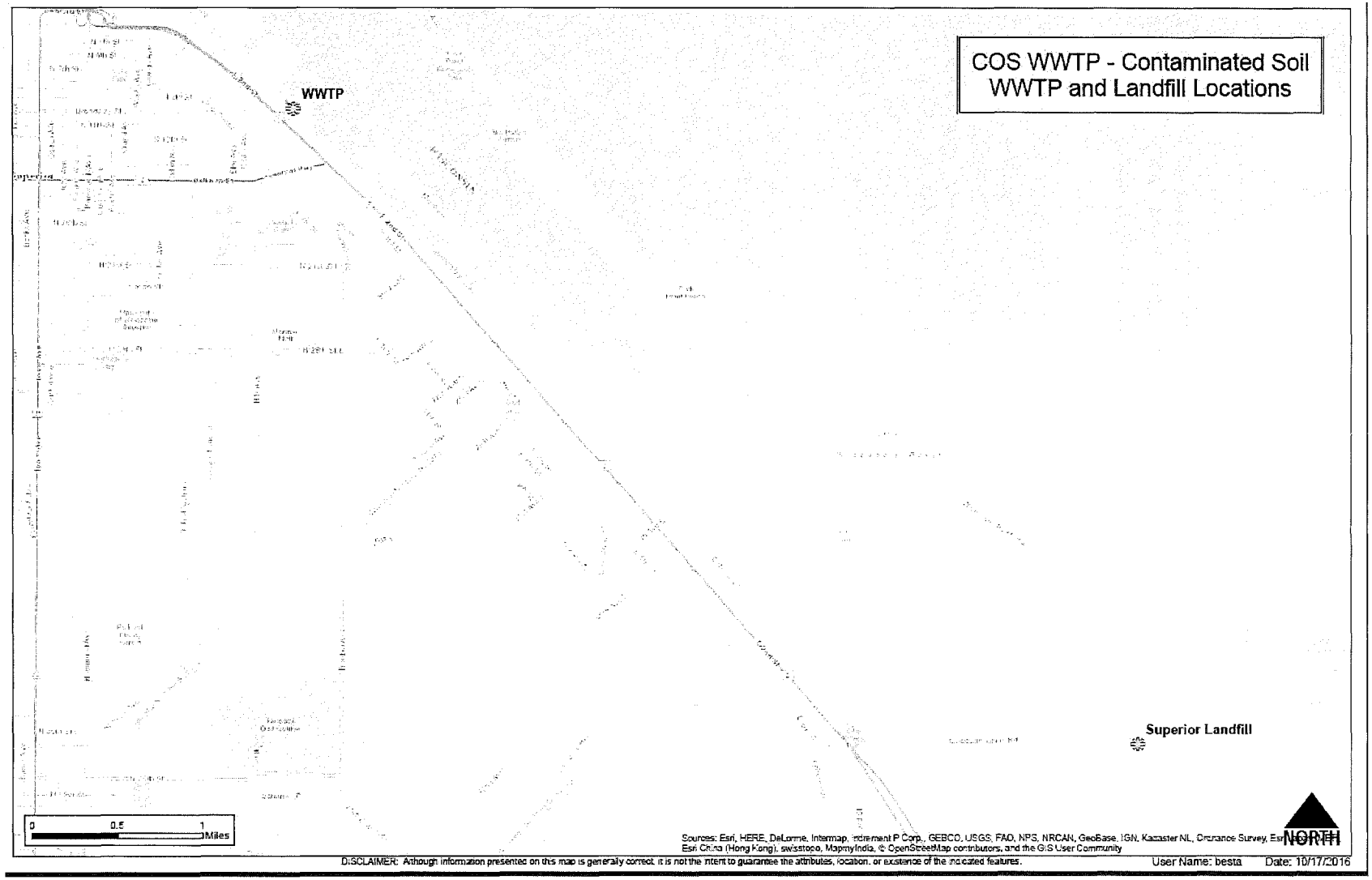

Figure 2. Location of WWTP Contamination Site and Landfill Disposal Site

SECTION 3 – CLEANUP INFORMATION

3.1. CONTAMINATION INFORMATION

When contaminated soils were first identified in the construction area, a sample was obtained for Diesel Range Organics (DRO) from what appeared to be the most contaminated area. This sample showed the level of DRO as 367 mg/kg. A sample was also taken from a stockpile of what was considered contaminated soil. This sample was 116 mg/kg.

The construction project excavation site is shown below. Soils within the project area have been dug up and replaced multiple times to the point they are all considered contaminated. As the soil is structurally supporting the pipes, valves and devices underground, small areas are excavated, work is performed and the soil is replaced. The excavation of soil and replacement occurs repeatedly throughout the construction project. This essentially results in the contaminated layer being mixed with the soil above and below created a somewhat homogenous mixture. While samples taken early in the project may be less mixed, by the end of the project all soil will be contaminated and require removal.

Excavation depths for the construction project range from six feet in places to twenty plus feet in others. Deeper excavations are often at an angle vs. straight down for various reasons. To calculate an estimate of the total volume of contaminated soils we will be removing, we used an average depth of ten feet. This resulted in an excavation volume of just over 4,400 cubic yards.

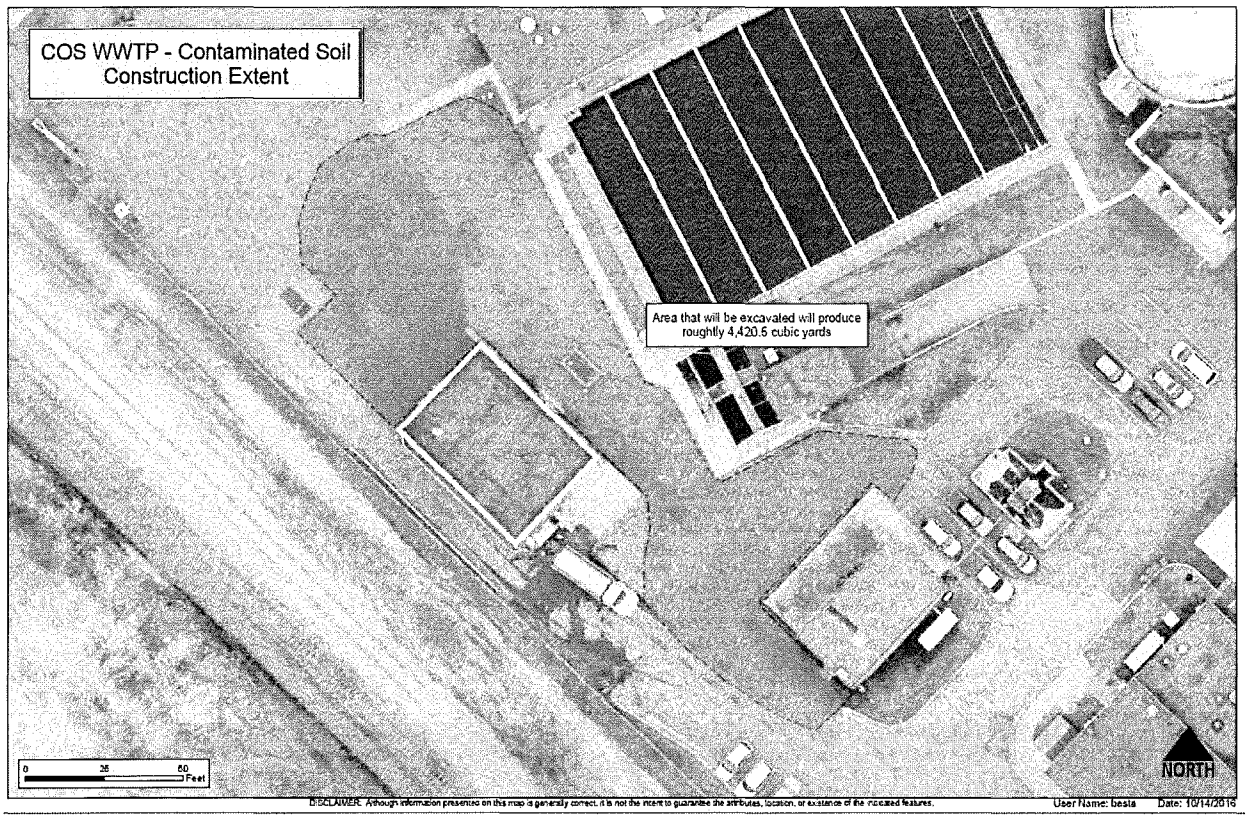

Figure 3 Project Area

3.2. SAMPLING INFORMATION

Twenty samples were collected to meet the requirements of NR 718.12(1)(e)1. A map of the sample locations and depth of sampling is shown in Figure 4. Samples were taken at various locations and depths. As the soil has been turned over multiple times the contamination is deemed to be throughout the site.

Three soil samples were submitted to Pace Laboratory in Duluth, MN for analysis for landfill acceptance, which included: Gasoline Range Organics (GRO), Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), flash point and pH. An additional seventeen samples were collected and analyzed for GRO, PAHs, and VOCs to total the twenty required samples. Laboratory analytical results indicated levels of PAHs that were above the NR 720 residual contaminant levels for direct contact and/or protection of groundwater, where established, detected in the soil samples. The analysis also indicated the impacted soil met the criteria for disposal at Moccasin Mike Landfill.

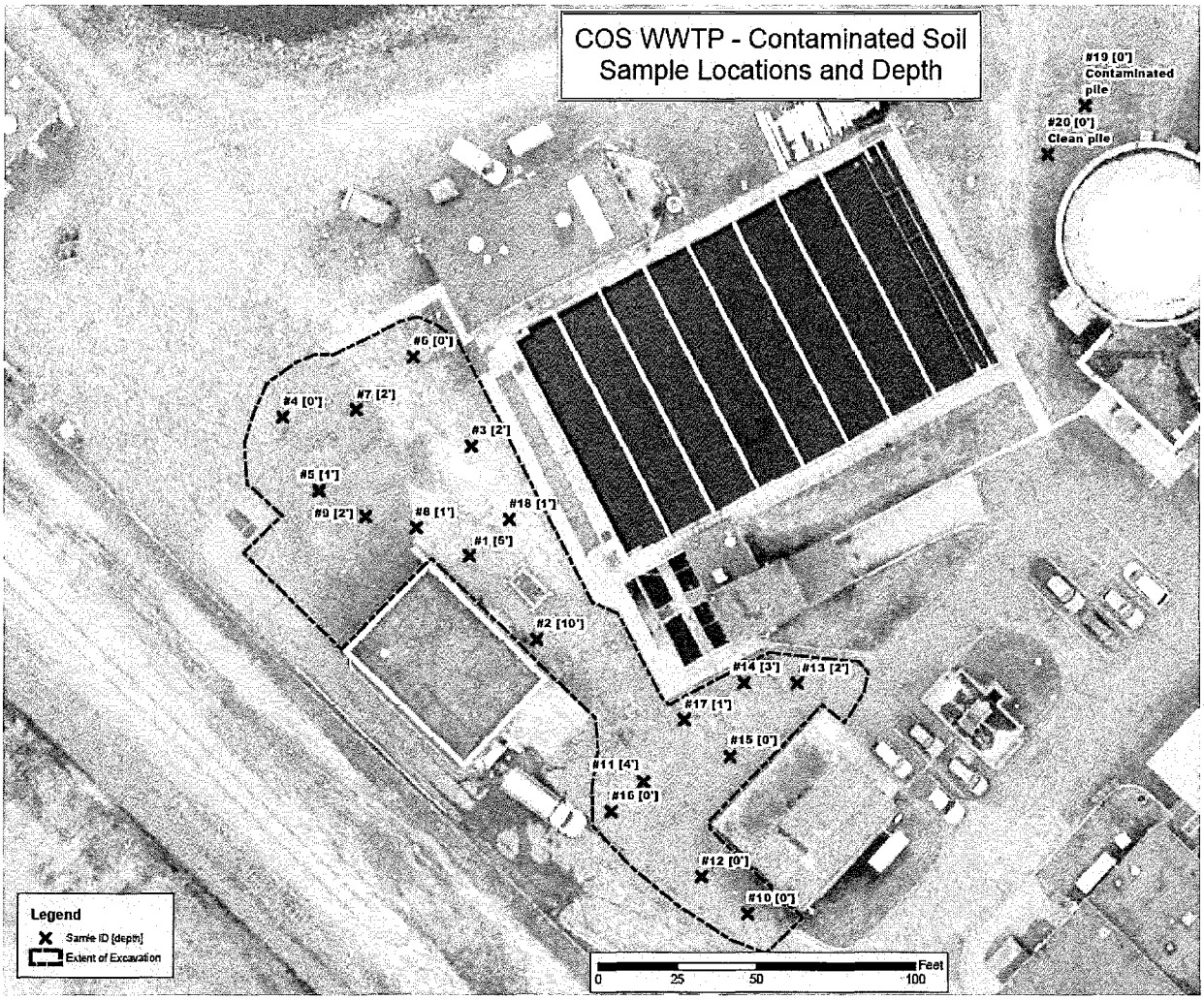

Figure 4 Sampling Locations

The concentrations of contaminants from acquired samples are shown in the following table. All samples came back below the Limit of Detection (LOD) for GRO and Volatile/Semi-volatile Organic Compounds. Levels of total PAHs ranged from 0.2 to 86 mg/kg. The highest concentration was from the stockpile (#19) identified as contaminated soils. Samples #15 and #20 were both 0.2 mg/kg.

	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene
WWTP1	0.1	0.046J	0.25	0.39	0.43	0.58	0.11	0.24	0.45	0.035
WWTP2	0.09	0.019J	0.31	0.49	0.4	0.48	0.22	0.22	0.6	0.046
WWTP3	0.055	0.019J	0.14	0.36	0.42	0.62	0.084	0.21	0.41	0.03
WWTP4	0.17	0.024J	0.28	0.53	0.54	0.66	0.31	0.29	0.67	0.074
WWTP5	0.13	0.030J	0.35	0.56	0.56	0.69	0.33	0.3	0.7	0.075
WWTP6	0.13	0.023J	0.36	0.73	0.75	1.1	0.17	0.49	0.81	0.06
WWTP7	0.0094J	<0.0042	0.023J	0.057	0.068	0.075	0.037	0.034	0.076	0.0081J
WWTP8	0.0094J	<0.0042	0.023J	0.057	0.068	0.075	0.037	0.034	0.076	0.0081J
WWTP9	0.015J	<0.0044	0.04	0.061	0.061	0.074	0.032	0.035	0.081	0.0088J
WWTP10	0.039	0.027	0.11	0.21	0.24	0.34	0.058	0.15	0.26	0.018
WWTP11	0.068	0.012J	0.13	0.22	0.21	0.24	0.11	0.11	0.25	0.03
WWTP12	0.24	<0.030	0.53	0.89	0.91	1.1	0.55	0.56	1.1	0.12
WWTP13	<0.0042	<0.0036	0.012J	0.026	0.026	0.032	0.016	0.019	0.039	0.0029J
WWTP14	<0.0041	<0.0035	0.0077J	1/0/1900	0.026	0.04	0.0076	0.017	0.028	<0.0024
WWTP15	<0.0042	<0.0035	<0.0061	0.018	0.02	0.032	0.0078	0.014	0.021	<0.0024
WWTP16	0.057	0.015	0.078	0.14	0.16	0.23	0.043	0.091	0.17	0.013
WWTP17	0.16	<0.018	0.36	0.57	0.55	0.65	0.31	0.31	0.66	0.073
WWTP18	0.21	0.025J	0.4	0.65	0.62	0.77	0.36	0.34	0.77	0.085
WWTP19	1.6	<0.32	5.2	5.6	3.7	4.9	1.6	2.4	6.6	0.34J
WWTP20	0.020J	0.011J	0.063	0.16	0.17	0.25	0.04	0.11	0.18	0.012J

Red font represents values above the limit of detection but below the limit of quantification.

Red font and red cell background are values below the limit of detection.

Values are in mg/kg units.

	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	**Total PAHs**
WWTP1	0.035	0.82	0.099	0.12	0.29	0.79	0.81	**5.51**
WWTP2	0.046	1.4	0.087	0.18	0.12J	1.1	1.3	**6.92**
WWTP3	0.03	0.67	0.057	0.086	0.16	0.55	0.67	**4.52**
WWTP4	0.074	1.4	0.16	0.28	0.32	1.5	1.3	**8.48**
WWTP5	0.075	1.6	0.15	0.29	0.27	1.5	1.4	**8.90**
WWTP6	0.06	1.6	0.14	0.18	0.22	1.3	1.5	**9.54**
WWTP7	0.0081J	0.12	0.0077J	0.033	0.019J	0.084	0.12	**0.704**
WWTP8	0.0081J	0.12	0.0077J	0.033	0.019J	0.084	0.12	**0.704**
WWTP9	0.0088J	0.17	0.017J	0.029	0.18	0.15	0.14	**1.05**
WWTP10	0.018	0.49	0.044	0.06	0.075	0.43	0.52	**3.07**
WWTP11	0.03	0.49	0.06	0.093	0.17	0.51	0.48	**3.17**
WWTP12	0.12	2.5	0.23	0.49	0.20J	2.4	2	**13.62**
WWTP13	0.0029J	0.064	<0.0045	0.014	0.012J	0.043	0.057	**0.336**
WWTP14	<0.0024	0.046	<0.0044	0.0073J	0.016J	0.032J	0.054	**0.243**
WWTP15	<0.0024	0.03	<0.0044	0.0063J	0.013J	0.020J	0.033	**0.176**
WWTP16	0.013	0.32	0.04	0.04	0.14	0.29	0.33	**2.16**
WWTP17	0.073	1.6	0.15	0.28	0.10J	1.5	1.3	**8.47**
WWTP18	0.085	1.8	0.2	0.31	0.29	1.8	1.5	**10.1**
WWTP19	0.34J	18.3	1.9	1.4	<0.81	17.4	15.4	**86**
WWTP20	0.012J	0.32	0.021J	0.042	0.089	0.23	0.33	**1.98**

Red font represents values above the limit of detection but below the limit of quantification.

Red font and pink cell background are values below the limit of detection.

Values are in mg/kg units.

These values exceed the Wisconsin TEC (Threshold Exposure Concentrations) for contaminated soils; therefore the soil will be excavated and landfilled.

3.3. SOIL MANAGEMENT

Soil disturbance will be minimized to prevent creating additional contaminated soil that will need to be removed. Only the soil disturbed by the project will be excavated and replaced with clean fill material. While contamination may be evident on the side walls during the soil replacement phase, if it was undisturbed during the construction project it will remain in place.

As the soil is integral to the structural support of the piping and appurtenances that are being replaced or installed, soil removal will occur in stages. The current stockpiles will be transported to the landfill as soon as approval is received. As work progresses on the construction project, soil is typically removed, work is completed, and the soil is backfilled into the excavated area. After the plan is approved, this will continue until the last time an area needs work. At that time, the excavation area will be backfilled with clean fill vs the contaminated soils.

Soil stockpiling will be minimized as the bulk of the material will be returned to the dig site until completion of the project. Any stockpiles that are established will be sited near our Combined Sewage Treatment Plant #2. While this location will need an exemption for the 300' setback from water requirement, it will ensure any runoff that might occur from the stockpile will sheet flow into the overflow pond and be treated with the combined sewage contained in the pond.

Each load will be tracked using the landfill's Special Waste Tracking Form and recorded on a spreadsheet for recordkeeping purposes.

3.4. CONTRACTOR INFORMATION

The main contractor for the construction project is Lakehead Constructors Inc., 2916 Hill Ave. They are responsible for the entire project, including replacement of raw wastewater pumps and process piping and associated electrical, and instrumentation and control work at the City of Superior Main Wastewater Treatment Plant.

They will also be responsible for the excavation of contaminated soil, backfilling with clean fill material, and transporting the contaminated soils to the landfill.

Brian C. Maki, President	kpylka@lakeheadconstructors.com	715-392-5181
Lance Johnson, Project Superintendent	ljohnson@lakeheadconstructors.com	715-392-5181
Todd Koneczny, Project Manager	tkoneczny@lakeheadconstructors.com	715-395-2628

3.5. TIMELINE

Construction is expected to be completed by December 31st. This date could be sooner or later and is highly dependent on when various required components are received from the manufacturer. Excavation will begin immediately after the construction is completed and is estimated to take approximately one week.

3.6. CERTIFICATION

"I, Diane R Nelson, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Diane R Nelson Admin Manager 11-4-16

Signature Title Date

APPENDIX

Soil Sample Analysis

	Units	WWTP1	WWTP2	WWTP3	WWTP4	WWTP5	WWTP6
GRO	mg/kg	<2.9	<3.0	<2.9	<2.8	<2.8	<2.8
Percent Moisture	%	14.6	15.8	13.4	12.1	10.8	11.9
PAHs (method 8270)							
Acenaphthene	mg/kg	0.1	0.09	0.055	0.17	0.13	0.13
Acenaphthylene	mg/kg	0.046J	0.019J	0.019J	0.024J	0.030J	0.023J
Anthracene	mg/kg	0.25	0.31	0.14	0.28	0.35	0.36
Benzo(a)anthracene	mg/kg	0.39	0.49	0.36	0.53	0.56	0.73
Benzo(a)pyrene	mg/kg	0.43	0.4	0.42	0.54	0.56	0.75
Benzo(b)fluoranthene	mg/kg	0.58	0.48	0.62	0.66	0.69	1.1
Benzo(g,h,i)perylene	mg/kg	0.11	0.22	0.084	0.31	0.33	0.17
Benzo(k)fluoranthene	mg/kg	0.24	0.22	0.21	0.29	0.3	0.49
Chrysene	mg/kg	0.45	0.6	0.41	0.67	0.7	0.81
Dibenz(a,h)anthracene	mg/kg	0.035	0.046	0.03	0.074	0.075	0.06
Fluoranthene	mg/kg	0.82	1.4	0.67	1.4	1.6	1.6
Fluorene	mg/kg	0.099	0.087	0.057	0.16	0.15	0.14
Indeno(1,2,3-cd)pyrene	mg/kg	0.12	0.18	0.086	0.28	0.29	0.18
Naphthalene	mg/kg	0.29	0.12J	0.16	0.32	0.27	0.22
Phenanthrene	mg/kg	0.79	1.1	0.55	1.5	1.5	1.3
Pyrene	mg/kg	0.81	1.3	0.67	1.3	1.4	1.5
Total PAHs	**mg/kg**	**5.514**	**6.923**	**4.522**	**8.484**	**8.905**	**9.54**
Semi-Volatile (method 8270)							
1,4-Dichlorobenzene	ug/L	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4
2,4-Dinitrotoluene	ug/L	<10	<10	<10	<10	<10	<10
Hexachloro-1,3-butadiene	ug/L	<18.2	<18.2	<18.2	<18.2	<18.2	<18.2
Hexachlorobenzene	ug/L	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7

	Units	WWTP1	WWTP2	WWTP3	WWTP4	WWTP5	WWTP6
Hexachloroethane	ug/L	<14.8	<14.8	<14.8	<14.8	<14.8	<14.8
2-Methylphenol(o-Cresol)	ug/L	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6
3&4-Methylphenol(m&p Cresc	ug/L	<12.8	<12.8	<12.8	<12.8	<12.8	<12.8
Nitrobenzene	ug/L	<10.3	<10.3	<10.3	<10.3	<10.3	<10.3
Pentachlorophenol	ug/L	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
Pyridine	ug/L	<14.6	<14.6	<14.6	<14.6	<14.6	<14.6
2,4,5-Trichlorophenol	ug/L	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6
2,4,6-Trichlorophenol	ug/L	<10.5	<10.5	<10.5	<10.5	<10.5	<10.5
Volatile Organic Compounds (method 8260)							
Benzene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2-Butanone (MEK)	mg/L	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
Carbon tetrachloride	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chlorobenzene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chloroform	mg/L	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	mg/L	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017
1,1-Dichloroethene	mg/L	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
Tetrachloroethene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Trichloroethene	mg/L	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033
Vinyl chloride	mg/L	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018
Flashpoint							
pH	std units						

	Units	WWTP7	WWTP8	WWTP9	WWTP10	WWTP11	WWTP12
GRO	mg/kg	<3.2	<3.3	<2.7	<3.0	<3.0	<2.8
Percent Moisture	%	21.2	24.9	7.9	16.0	16.6	11.9
PAHs (method 8270)							
Acenaphthene	mg/kg	0.0094J	0.0094J	0.015J	0.039	0.068	0.24
Acenaphthylene	mg/kg	<0.0042	<0.0042	<0.0044	0.027	0.012J	<0.030
Anthracene	mg/kg	0.023J	0.023J	0.04	0.11	0.13	0.53
Benzo(a)anthracene	mg/kg	0.057	0.057	0.061	0.21	0.22	0.89
Benzo(a)pyrene	mg/kg	0.068	0.068	0.061	0.24	0.21	0.91
Benzo(b)fluoranthene	mg/kg	0.075	0.075	0.074	0.34	0.24	1.1
Benzo(g,h,i)perylene	mg/kg	0.037	0.037	0.032	0.058	0.11	0.55
Benzo(k)fluoranthene	mg/kg	0.034	0.034	0.035	0.15	0.11	0.56
Chrysene	mg/kg	0.076	0.076	0.081	0.26	0.25	1.1
Dibenz(a,h)anthracene	mg/kg	0.0081J	0.0081J	0.0088J	0.018	0.03	0.12
Fluoranthene	mg/kg	0.12	0.12	0.17	0.49	0.49	2.5
Fluorene	mg/kg	0.0077J	0.0077J	0.017J	0.044	0.06	0.23
Indeno(1,2,3-cd)pyrene	mg/kg	0.033	0.033	0.029	0.06	0.093	0.49
Naphthalene	mg/kg	0.019J	0.019J	0.18	0.075	0.17	0.20J
Phenanthrene	mg/kg	0.084	0.084	0.15	0.43	0.51	2.4
Pyrene	mg/kg	0.12	0.12	0.14	0.52	0.48	2
Total PAHs	**mg/kg**	**0.704**	**0.704**	**1.053**	**3.071**	**3.171**	**13.62**
Semi-Volatile (method 8270)							
1,4-Dichlorobenzene	ug/L	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4
2,4-Dinitrotoluene	ug/L	<10	<10	<10	<10	<10	<10
Hexachloro-1,3-butadiene	ug/L	<18.2	<18.2	<18.2	<18.2	<18.2	<18.2
Hexachlorobenzene	ug/L	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7

	Units	WWTP7	WWTP8	WWTP9	WWTP10	WWTP11	WWTP12
Hexachloroethane	ug/L	<14.8	<14.8	<14.8	<14.8	<14.8	<14.8
2-Methylphenol(o-Cresol)	ug/L	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6
3&4-Methylphenol(m&p Cresc	ug/L	<12.8	<12.8	<12.8	<12.8	<12.8	<12.8
Nitrobenzene	ug/L	<10.3	<10.3	<10.3	<10.3	<10.3	<10.3
Pentachlorophenol	ug/L	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
Pyridine	ug/L	<14.6	<14.6	<14.6	<14.6	<14.6	<14.6
2,4,5-Trichlorophenol	ug/L	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6
2,4,6-Trichlorophenol	ug/L	<10.5	<10.5	<10.5	<10.5	<10.5	<10.5
Volatile Organic Compounds (							
Benzene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2-Butanone (MEK)	mg/L	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
Carbon tetrachloride	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chlorobenzene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chloroform	mg/L	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	mg/L	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017
1,1-Dichloroethene	mg/L	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
Tetrachloroethene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Trichloroethene	mg/L	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033
Vinyl chloride	mg/L	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018
Flashpoint							
pH	std units						

	Units	WWTP13	WWTP14	WWTP15	WWTP16	WWTP17	WWTP18
GRO	mg/kg	<2.7	<2.7	<2.7	<3.0	<2.7	<2.9
Percent Moisture	%	7.7	5.9	6.8	16.4	6.3	13.7
PAHs (method 8270)							
Acenaphthene	mg/kg	<0.0042	<0.0041	<0.0042	0.057	0.16	0.21
Acenaphthylene	mg/kg	<0.0036	<0.0035	<0.0035	0.015	<0.018	0.025J
Anthracene	mg/kg	0.012J	0.0077J	<0.0061	0.078	0.36	0.4
Benzo(a)anthracene	mg/kg	0.026	1/0/1900	0.018	0.14	0.57	0.65
Benzo(a)pyrene	mg/kg	0.026	0.026	0.02	0.16	0.55	0.62
Benzo(b)fluoranthene	mg/kg	0.032	0.04	0.032	0.23	0.65	0.77
Benzo(g,h,i)perylene	mg/kg	0.016	0.0076	0.0078	0.043	0.31	0.36
Benzo(k)fluoranthene	mg/kg	0.019	0.017	0.014	0.091	0.31	0.34
Chrysene	mg/kg	0.039	0.028	0.021	0.17	0.66	0.77
Dibenz(a,h)anthracene	mg/kg	0.0029J	<0.0024	<0.0024	0.013	0.073	0.085
Fluoranthene	mg/kg	0.064	0.046	0.03	0.32	1.6	1.8
Fluorene	mg/kg	<0.0045	<0.0044	<0.0044	0.04	0.15	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.014	0.0073J	0.0063J	0.04	0.28	0.31
Naphthalene	mg/kg	0.012J	0.016J	0.013J	0.14	0.10J	0.29
Phenanthrene	mg/kg	0.043	0.032J	0.020J	0.29	1.5	1.8
Pyrene	mg/kg	0.057	0.054	0.033	0.33	1.3	1.5
Total PAHs	**mg/kg**	**0.336**	**0.2426**	**0.1758**	**2.157**	**8.473**	**10.105**
Semi-Volatile (method 8270)							
1,4-Dichlorobenzene	ug/L	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4
2,4-Dinitrotoluene	ug/L	<10	<10	<10	<10	<10	<10
Hexachloro-1,3-butadiene	ug/L	<18.2	<18.2	<18.2	<18.2	<18.2	<18.2
Hexachlorobenzene	ug/L	<5.7	<5.7	<5.7	<5.7	<5.7	<5.7

	Units	WWTP13	WWTP14	WWTP15	WWTP16	WWTP17	WWTP18
Hexachloroethane	ug/L	<14.8	<14.8	<14.8	<14.8	<14.8	<14.8
2-Methylphenol(o-Cresol)	ug/L	<9.6	<9.6	<9.6	<9.6	<9.6	<9.6
3&4-Methylphenol(m&p Cresc	ug/L	<12.8	<12.8	<12.8	<12.8	<12.8	<12.8
Nitrobenzene	ug/L	<10.3	<10.3	<10.3	<10.3	<10.3	<10.3
Pentachlorophenol	ug/L	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
Pyridine	ug/L	<14.6	<14.6	<14.6	<14.6	<14.6	<14.6
2,4,5-Trichlorophenol	ug/L	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6
2,4,6-Trichlorophenol	ug/L	<10.5	<10.5	<10.5	<10.5	<10.5	<10.5
Volatile Organic Compounds (							
Benzene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2-Butanone (MEK)	mg/L	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
Carbon tetrachloride	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chlorobenzene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chloroform	mg/L	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	mg/L	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017
1,1-Dichloroethene	mg/L	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
Tetrachloroethene	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Trichloroethene	mg/L	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033
Vinyl chloride	mg/L	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018
Flashpoint							>210
pH	std units						8.11

	Units	WWTP19	WWTP20	AVG	Min	Max	Median	Std Dev
GRO	mg/kg	<3.0	<2.7					
Percent Moisture	%	16.8	7.6					
PAHs (method 8270)								
Acenaphthene	mg/kg	1.6	0.020J	0.23	0.039	1.6	0.13	0.41
Acenaphthylene	mg/kg	<0.32	0.011J	0.02	0.015	0.027	0.021	0.01
Anthracene	mg/kg	5.2	0.063	0.57	0.04	5.2	0.28	1.29
Benzo(a)anthracene	mg/kg	5.6	0.16	0.59	0.018	5.6	0.29	1.21
Benzo(a)pyrene	mg/kg	3.7	0.17	0.50	0.02	3.7	0.32	0.80
Benzo(b)fluoranthene	mg/kg	4.9	0.25	0.65	0.032	4.9	0.41	1.06
Benzo(g,h,i)perylene	mg/kg	1.6	0.04	0.22	0.0076	1.6	0.097	0.36
Benzo(k)fluoranthene	mg/kg	2.4	0.11	0.30	0.014	2.4	0.18	0.52
Chrysene	mg/kg	6.6	0.18	0.70	0.021	6.6	0.335	1.43
Dibenz(a,h)anthracene	mg/kg	0.34J	0.012J	0.05	0.013	0.12	0.053	0.03
Fluoranthene	mg/kg	18.3	0.32	1.69	0.03	18.3	0.58	3.98
Fluorene	mg/kg	1.9	0.021J	0.26	0.04	1.9	0.14	0.50
Indeno(1,2,3-cd)pyrene	mg/kg	1.4	0.042	0.22	0.014	1.4	0.1065	0.32
Naphthalene	mg/kg	<0.81	0.089	0.20	0.075	0.32	0.18	0.08
Phenanthrene	mg/kg	17.4	0.23	1.76	0.043	17.4	0.67	3.97
Pyrene	mg/kg	15.4	0.33	1.47	0.033	15.4	0.595	3.34
Total PAHs	**mg/kg**	**86**	**1.984**		0.1758	86	3.8465	18.61
Semi-Volatile (method 8270)						**Landfill Limit**		
1,4-Dichlorobenzene	ug/L	<19.4	<19.4			**<7.5**		
2,4-Dinitrotoluene	ug/L	<10	<10			**<0.13**		
Hexachloro-1,3-butadiene	ug/L	<18.2	<18.2			**<0.5**		
Hexachlorobenzene	ug/L	<5.7	<5.7			**<0.13**		

	Units	WWTP19	WWTP20	AVG	Min	Max	Median	Std Dev
Hexachloroethane	ug/L	<14.8	<14.8			**<3.0**		
2-Methylphenol(o-Cresol)	ug/L	<9.6	<9.6			**<200**		
3&4-Methylphenol(m&p Cresc	ug/L	<12.8	<12.8			**<200**		
Nitrobenzene	ug/L	<10.3	<10.3			**<2.0**		
Pentachlorophenol	ug/L	<7.5	<7.5			**< 100**		
Pyridine	ug/L	<14.6	<14.6			**<5**		
2,4,5-Trichlorophenol	ug/L	<7.6	<7.6			**<400**		
2,4,6-Trichlorophenol	ug/L	<10.5	<10.5			**<2**		
Volatile Organic Compounds (								
Benzene	mg/L	<0.0050	<0.0050			**<0.5**		
2-Butanone (MEK)	mg/L	<0.030	<0.030			**<200**		
Carbon tetrachloride	mg/L	<0.0050	<0.0050			**<0.5**		
Chlorobenzene	mg/L	<0.0050	<0.0050			**<100**		
Chloroform	mg/L	<0.025	<0.025			**<6.0**		
1,2-Dichloroethane	mg/L	<0.0017	<0.0017			**<0.5**		
1,1-Dichloroethene	mg/L	<0.0041	<0.0041			**<0.7**		
Tetrachloroethene	mg/L	<0.0050	<0.0050			**<0.5**		
Trichloroethene	mg/L	<0.0033	<0.0033			**<0.7**		
Vinyl chloride	mg/L	<0.0018	<0.0018			**<0.2**		
Flashpoint		>210	>210					
pH	std units	8.1	8.21					

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Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

November 03, 2016

Ada Tse
City of Superior
51 E 1st Street
Superior, WI 54880

RE: Project: WWTP Soil
Pace Project No.: 1277470

Dear Ada Tse:
Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Laura Flood
laura.flood@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

CERTIFICATIONS

Project: WWTP Soil
Pace Project No.: 1277470

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
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SAMPLE SUMMARY

Project: WWTP Soil
Pace Project No.: 1277470

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1277470001	WWTP 1	Solid	10/19/16 13:30	10/20/16 09:00
1277470002	WWTP 2	Solid	10/19/16 13:40	10/20/16 09:00
1277470003	WWTP 3	Solid	10/19/16 13:43	10/20/16 09:00
1277470004	WWTP 4	Solid	10/19/16 13:45	10/20/16 09:00
1277470005	WWTP 5	Solid	10/19/16 13:50	10/20/16 09:00
1277470006	WWTP 6	Solid	10/19/16 13:54	10/20/16 09:00
1277470007	WWTP 7	Solid	10/19/16 13:57	10/20/16 09:00
1277470008	WWTP 8	Solid	10/19/16 14:02	10/20/16 09:00
1277470009	WWTP 9	Solid	10/19/16 14:07	10/20/16 09:00
1277470010	WWTP 10	Solid	10/19/16 14:22	10/20/16 09:00
1277470011	WWTP 11	Solid	10/19/16 14:25	10/20/16 09:00
1277470012	WWTP 12	Solid	10/19/16 14:30	10/20/16 09:00
1277470013	WWTP 13	Solid	10/19/16 14:38	10/20/16 09:00
1277470014	WWTP 14	Solid	10/19/16 14:40	10/20/16 09:00
1277470015	WWTP 15	Solid	10/19/16 14:50	10/20/16 09:00
1277470016	WWTP 16	Solid	10/19/16 14:47	10/20/16 09:00
1277470017	WWTP 17	Solid	10/19/16 14:56	10/20/16 09:00
1277470018	WWTP 18	Solid	10/19/16 15:04	10/20/16 09:00
1277470019	WWTP 19	Solid	10/19/16 15:15	10/20/16 09:00
1277470020	WWTP 20	Solid	10/19/16 15:25	10/20/16 09:00

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SAMPLE ANALYTE COUNT

Project: WWTP Soil
Pace Project No.: 1277470

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1277470001	WWTP 1	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470002	WWTP 2	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470003	WWTP 3	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470004	WWTP 4	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470005	WWTP 5	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470006	WWTP 6	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470007	WWTP 7	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470008	WWTP 8	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WWTP Soil
Pace Project No.: 1277470

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470009	WWTP 9	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470010	WWTP 10	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470011	WWTP 11	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470012	WWTP 12	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470013	WWTP 13	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470014	WWTP 14	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	LAP	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470015	WWTP 15	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	HNW	13	PASI-G

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WWTP Soil
Pace Project No.: 1277470

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974-87	MAM	1	PASI-G
1277470016	WWTP 16	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	HNW	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470017	WWTP 17	WI MOD GRO	ALD	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	HNW	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
1277470018	WWTP 18	WI MOD GRO	ALD	1	PASI-G
		EPA 6010	DLB	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	HNW	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
		EPA 1010	DEY	1	PASI-G
		EPA 9045	ALY	1	PASI-G
		EPA 9095	DEY	1	PASI-G
1277470019	WWTP 19	WI MOD GRO	ALD	1	PASI-G
		EPA 6010	DLB	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	HNW	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
		EPA 1010	DEY	1	PASI-G
		EPA 9045	ALY	1	PASI-G
		EPA 9095	DEY	1	PASI-G
1277470020	WWTP 20	WI MOD GRO	ALD	1	PASI-G
		EPA 6010	DLB	1	PASI-G
		EPA 8270 by SIM	RJN	18	PASI-G
		EPA 8270	RJN	16	PASI-G
		EPA 8260	HNW	13	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
		EPA 1010	DEY	1	PASI-G
		EPA 9045	ALY	1	PASI-G

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

SAMPLE ANALYTE COUNT

Project: WWTP Soil
Pace Project No.: 1277470

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9095	DEY	1	PASI-G

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 1 **Lab ID: 1277470001** Collected: 10/19/16 13:30 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.9**	mg/kg	5.9	2.9	1	10/24/16 06:30	10/24/16 10:16		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.10**	mg/kg	0.060	0.018	4	10/28/16 09:15	11/02/16 00:30	83-32-9	
Acenaphthylene	**0.046J**	mg/kg	0.051	0.015	4	10/28/16 09:15	11/02/16 00:30	208-96-8	
Anthracene	**0.25**	mg/kg	0.089	0.027	4	10/28/16 09:15	11/02/16 00:30	120-12-7	
Benzo(a)anthracene	**0.39**	mg/kg	0.050	0.015	4	10/28/16 09:15	11/02/16 00:30	56-55-3	
Benzo(a)pyrene	**0.43**	mg/kg	0.039	0.012	4	10/28/16 09:15	11/02/16 00:30	50-32-8	
Benzo(b)fluoranthene	**0.58**	mg/kg	0.044	0.013	4	10/28/16 09:15	11/02/16 00:30	205-99-2	
Benzo(g,h,i)perylene	**0.11**	mg/kg	0.032	0.0095	4	10/28/16 09:15	11/02/16 00:30	191-24-2	
Benzo(k)fluoranthene	**0.24**	mg/kg	0.039	0.012	4	10/28/16 09:15	11/02/16 00:30	207-08-9	
Chrysene	**0.45**	mg/kg	0.052	0.016	4	10/28/16 09:15	11/02/16 00:30	218-01-9	
Dibenz(a,h)anthracene	**0.035**	mg/kg	0.035	0.010	4	10/28/16 09:15	11/02/16 00:30	53-70-3	
Fluoranthene	**0.82**	mg/kg	0.081	0.024	4	10/28/16 09:15	11/02/16 00:30	206-44-0	
Fluorene	**0.099**	mg/kg	0.065	0.019	4	10/28/16 09:15	11/02/16 00:30	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.12**	mg/kg	0.034	0.010	4	10/28/16 09:15	11/02/16 00:30	193-39-5	
Naphthalene	**0.29**	mg/kg	0.13	0.039	4	10/28/16 09:15	11/02/16 00:30	91-20-3	
Phenanthrene	**0.79**	mg/kg	0.18	0.055	4	10/28/16 09:15	11/02/16 00:30	85-01-8	
Pyrene	**0.81**	mg/kg	0.070	0.021	4	10/28/16 09:15	11/02/16 00:30	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	66	%	26-130		4	10/28/16 09:15	11/02/16 00:30	321-60-8	
Terphenyl-d14 (S)	78	%	10-130		4	10/28/16 09:15	11/02/16 00:30	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	10/28/16 08:00	10/31/16 12:35	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	10/28/16 08:00	10/31/16 12:35	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	10/28/16 08:00	10/31/16 12:35	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	10/28/16 08:00	10/31/16 12:35	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	10/28/16 08:00	10/31/16 12:35	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	10/28/16 08:00	10/31/16 12:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	10/28/16 08:00	10/31/16 12:35		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	10/28/16 08:00	10/31/16 12:35	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	10/28/16 08:00	10/31/16 12:35	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	10/28/16 08:00	10/31/16 12:35	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	10/28/16 08:00	10/31/16 12:35	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	10/28/16 08:00	10/31/16 12:35	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	82	%	43-130		1	10/28/16 08:00	10/31/16 12:35	4165-60-0	
2-Fluorobiphenyl (S)	73	%	41-130		1	10/28/16 08:00	10/31/16 12:35	321-60-8	
Phenol-d6 (S)	33	%	15-130		1	10/28/16 08:00	10/31/16 12:35	13127-88-3	
2,4,6-Tribromophenol (S)	92	%	42-140		1	10/28/16 08:00	10/31/16 12:35	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 16:32	71-43-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 1 **Lab ID: 1277470001** Collected: 10/19/16 13:30 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/26/16 16:32	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 16:32	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 16:32	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/26/16 16:32	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/26/16 16:32	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/26/16 16:32	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 16:32	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/26/16 16:32	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/26/16 16:32	75-01-4	
Surrogates									
Toluene-d8 (S)	97	%	70-130		10		10/26/16 16:32	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		10		10/26/16 16:32	460-00-4	
Dibromofluoromethane (S)	92	%	70-130		10		10/26/16 16:32	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**14.6**	%	0.10	0.10	1		10/26/16 15:18		

Sample: WWTP 2 **Lab ID: 1277470002** Collected: 10/19/16 13:40 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<3.0**	mg/kg	5.9	3.0	1	10/24/16 06:30	10/24/16 10:41		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.090**	mg/kg	0.061	0.018	4	10/28/16 09:16	10/31/16 08:54	83-32-9	
Acenaphthylene	**0.019J**	mg/kg	0.052	0.016	4	10/28/16 09:16	10/31/16 08:54	208-96-8	
Anthracene	**0.31**	mg/kg	0.090	0.027	4	10/28/16 09:16	10/31/16 08:54	120-12-7	
Benzo(a)anthracene	**0.49**	mg/kg	0.050	0.015	4	10/28/16 09:16	10/31/16 08:54	56-55-3	
Benzo(a)pyrene	**0.40**	mg/kg	0.040	0.012	4	10/28/16 09:16	10/31/16 08:54	50-32-8	
Benzo(b)fluoranthene	**0.48**	mg/kg	0.045	0.013	4	10/28/16 09:16	10/31/16 08:54	205-99-2	
Benzo(g,h,i)perylene	**0.22**	mg/kg	0.032	0.0096	4	10/28/16 09:16	10/31/16 08:54	191-24-2	
Benzo(k)fluoranthene	**0.22**	mg/kg	0.040	0.012	4	10/28/16 09:16	10/31/16 08:54	207-08-9	
Chrysene	**0.60**	mg/kg	0.053	0.016	4	10/28/16 09:16	10/31/16 08:54	218-01-9	
Dibenz(a,h)anthracene	**0.046**	mg/kg	0.035	0.011	4	10/28/16 09:16	10/31/16 08:54	53-70-3	
Fluoranthene	**1.4**	mg/kg	0.083	0.025	4	10/28/16 09:16	10/31/16 08:54	206-44-0	
Fluorene	**0.087**	mg/kg	0.066	0.020	4	10/28/16 09:16	10/31/16 08:54	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.18**	mg/kg	0.035	0.010	4	10/28/16 09:16	10/31/16 08:54	193-39-5	
Naphthalene	**0.12J**	mg/kg	0.13	0.040	4	10/28/16 09:16	10/31/16 08:54	91-20-3	
Phenanthrene	**1.1**	mg/kg	0.18	0.055	4	10/28/16 09:16	10/31/16 08:54	85-01-8	
Pyrene	**1.3**	mg/kg	0.071	0.021	4	10/28/16 09:16	10/31/16 08:54	129-00-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 2 **Lab ID: 1277470002** Collected: 10/19/16 13:40 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	60	%	26-130		4	10/28/16 09:16	10/31/16 08:54	321-60-8	
Terphenyl-d14 (S)	69	%	10-130		4	10/28/16 09:16	10/31/16 08:54	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	10/28/16 08:00	10/31/16 12:56	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	10/28/16 08:00	10/31/16 12:56	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	10/28/16 08:00	10/31/16 12:56	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	10/28/16 08:00	10/31/16 12:56	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	10/28/16 08:00	10/31/16 12:56	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	10/28/16 08:00	10/31/16 12:56	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	10/28/16 08:00	10/31/16 12:56		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	10/28/16 08:00	10/31/16 12:56	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	10/28/16 08:00	10/31/16 12:56	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	10/28/16 08:00	10/31/16 12:56	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	10/28/16 08:00	10/31/16 12:56	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	10/28/16 08:00	10/31/16 12:56	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	76	%	43-130		1	10/28/16 08:00	10/31/16 12:56	4165-60-0	
2-Fluorobiphenyl (S)	69	%	41-130		1	10/28/16 08:00	10/31/16 12:56	321-60-8	
Phenol-d6 (S)	32	%	15-130		1	10/28/16 08:00	10/31/16 12:56	13127-88-3	
2,4,6-Tribromophenol (S)	89	%	42-140		1	10/28/16 08:00	10/31/16 12:56	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 16:54	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/26/16 16:54	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 16:54	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 16:54	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/26/16 16:54	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/26/16 16:54	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/26/16 16:54	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 16:54	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/26/16 16:54	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/26/16 16:54	75-01-4	
Surrogates									
Toluene-d8 (S)	93	%	70-130		10		10/26/16 16:54	2037-26-5	
4-Bromofluorobenzene (S)	89	%	70-130		10		10/26/16 16:54	460-00-4	
Dibromofluoromethane (S)	94	%	70-130		10		10/26/16 16:54	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**15.8**	%	0.10	0.10	1		10/26/16 15:18		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 3 **Lab ID: 1277470003** Collected: 10/19/16 13:43 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.9**	mg/kg	5.8	2.9	1	10/24/16 06:30	10/24/16 11:07		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.055**	mg/kg	0.030	0.0090	2	10/28/16 09:16	11/02/16 00:47	83-32-9	
Acenaphthylene	**0.019J**	mg/kg	0.025	0.0076	2	10/28/16 09:16	11/02/16 00:47	208-96-8	
Anthracene	**0.14**	mg/kg	0.044	0.013	2	10/28/16 09:16	11/02/16 00:47	120-12-7	
Benzo(a)anthracene	**0.36**	mg/kg	0.024	0.0073	2	10/28/16 09:16	11/02/16 00:47	56-55-3	
Benzo(a)pyrene	**0.42**	mg/kg	0.019	0.0058	2	10/28/16 09:16	11/02/16 00:47	50-32-8	
Benzo(b)fluoranthene	**0.62**	mg/kg	0.022	0.0065	2	10/28/16 09:16	11/02/16 00:47	205-99-2	
Benzo(g,h,i)perylene	**0.084**	mg/kg	0.016	0.0047	2	10/28/16 09:16	11/02/16 00:47	191-24-2	
Benzo(k)fluoranthene	**0.21**	mg/kg	0.019	0.0058	2	10/28/16 09:16	11/02/16 00:47	207-08-9	
Chrysene	**0.41**	mg/kg	0.026	0.0078	2	10/28/16 09:16	11/02/16 00:47	218-01-9	
Dibenz(a,h)anthracene	**0.030**	mg/kg	0.017	0.0052	2	10/28/16 09:16	11/02/16 00:47	53-70-3	
Fluoranthene	**0.67**	mg/kg	0.040	0.012	2	10/28/16 09:16	11/02/16 00:47	206-44-0	
Fluorene	**0.057**	mg/kg	0.032	0.0096	2	10/28/16 09:16	11/02/16 00:47	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.086**	mg/kg	0.017	0.0051	2	10/28/16 09:16	11/02/16 00:47	193-39-5	
Naphthalene	**0.16**	mg/kg	0.065	0.019	2	10/28/16 09:16	11/02/16 00:47	91-20-3	
Phenanthrene	**0.55**	mg/kg	0.090	0.027	2	10/28/16 09:16	11/02/16 00:47	85-01-8	
Pyrene	**0.67**	mg/kg	0.035	0.010	2	10/28/16 09:16	11/02/16 00:47	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	56	%	26-130		2	10/28/16 09:16	11/02/16 00:47	321-60-8	
Terphenyl-d14 (S)	60	%	10-130		2	10/28/16 09:16	11/02/16 00:47	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	10/28/16 08:00	10/31/16 13:18	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	10/28/16 08:00	10/31/16 13:18	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	10/28/16 08:00	10/31/16 13:18	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	10/28/16 08:00	10/31/16 13:18	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	10/28/16 08:00	10/31/16 13:18	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	10/28/16 08:00	10/31/16 13:18	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	10/28/16 08:00	10/31/16 13:18		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	10/28/16 08:00	10/31/16 13:18	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	10/28/16 08:00	10/31/16 13:18	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	10/28/16 08:00	10/31/16 13:18	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	10/28/16 08:00	10/31/16 13:18	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	10/28/16 08:00	10/31/16 13:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	74	%	43-130		1	10/28/16 08:00	10/31/16 13:18	4165-60-0	
2-Fluorobiphenyl (S)	63	%	41-130		1	10/28/16 08:00	10/31/16 13:18	321-60-8	
Phenol-d6 (S)	32	%	15-130		1	10/28/16 08:00	10/31/16 13:18	13127-88-3	
2,4,6-Tribromophenol (S)	82	%	42-140		1	10/28/16 08:00	10/31/16 13:18	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 17:17	71-43-2	

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 3 **Lab ID: 1277470003** Collected: 10/19/16 13:43 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/26/16 17:17	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 17:17	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 17:17	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/26/16 17:17	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/26/16 17:17	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/26/16 17:17	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 17:17	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/26/16 17:17	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/26/16 17:17	75-01-4	
Surrogates									
Toluene-d8 (S)	95	%	70-130		10		10/26/16 17:17	2037-26-5	
4-Bromofluorobenzene (S)	84	%	70-130		10		10/26/16 17:17	460-00-4	
Dibromofluoromethane (S)	96	%	70-130		10		10/26/16 17:17	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**13.4**	%	0.10	0.10	1		10/26/16 15:18		

Sample: WWTP 4 **Lab ID: 1277470004** Collected: 10/19/16 13:45 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.8**	mg/kg	5.7	2.8	1	10/24/16 06:30	10/24/16 11:33		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.17**	mg/kg	0.073	0.022	5	10/28/16 09:16	10/31/16 09:12	83-32-9	
Acenaphthylene	**0.024J**	mg/kg	0.063	0.019	5	10/28/16 09:16	10/31/16 09:12	208-96-8	
Anthracene	**0.28**	mg/kg	0.11	0.032	5	10/28/16 09:16	10/31/16 09:12	120-12-7	
Benzo(a)anthracene	**0.53**	mg/kg	0.060	0.018	5	10/28/16 09:16	10/31/16 09:12	56-55-3	
Benzo(a)pyrene	**0.54**	mg/kg	0.048	0.014	5	10/28/16 09:16	10/31/16 09:12	50-32-8	
Benzo(b)fluoranthene	**0.66**	mg/kg	0.054	0.016	5	10/28/16 09:16	10/31/16 09:12	205-99-2	
Benzo(g,h,i)perylene	**0.31**	mg/kg	0.039	0.012	5	10/28/16 09:16	10/31/16 09:12	191-24-2	
Benzo(k)fluoranthene	**0.29**	mg/kg	0.048	0.014	5	10/28/16 09:16	10/31/16 09:12	207-08-9	
Chrysene	**0.67**	mg/kg	0.064	0.019	5	10/28/16 09:16	10/31/16 09:12	218-01-9	
Dibenz(a,h)anthracene	**0.074**	mg/kg	0.042	0.013	5	10/28/16 09:16	10/31/16 09:12	53-70-3	
Fluoranthene	**1.4**	mg/kg	0.099	0.030	5	10/28/16 09:16	10/31/16 09:12	206-44-0	
Fluorene	**0.16**	mg/kg	0.078	0.024	5	10/28/16 09:16	10/31/16 09:12	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.28**	mg/kg	0.042	0.013	5	10/28/16 09:16	10/31/16 09:12	193-39-5	
Naphthalene	**0.32**	mg/kg	0.16	0.048	5	10/28/16 09:16	10/31/16 09:12	91-20-3	
Phenanthrene	**1.5**	mg/kg	0.22	0.066	5	10/28/16 09:16	10/31/16 09:12	85-01-8	
Pyrene	**1.3**	mg/kg	0.085	0.026	5	10/28/16 09:16	10/31/16 09:12	129-00-0	

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 4 **Lab ID: 1277470004** Collected: 10/19/16 13:45 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	63	%	26-130		5	10/28/16 09:16	10/31/16 09:12	321-60-8	
Terphenyl-d14 (S)	69	%	10-130		5	10/28/16 09:16	10/31/16 09:12	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	10/28/16 08:00	10/31/16 13:39	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	10/28/16 08:00	10/31/16 13:39	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	10/28/16 08:00	10/31/16 13:39	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	10/28/16 08:00	10/31/16 13:39	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	10/28/16 08:00	10/31/16 13:39	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	10/28/16 08:00	10/31/16 13:39	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	10/28/16 08:00	10/31/16 13:39		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	10/28/16 08:00	10/31/16 13:39	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	10/28/16 08:00	10/31/16 13:39	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	10/28/16 08:00	10/31/16 13:39	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	10/28/16 08:00	10/31/16 13:39	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	10/28/16 08:00	10/31/16 13:39	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	79	%	43-130		1	10/28/16 08:00	10/31/16 13:39	4165-60-0	
2-Fluorobiphenyl (S)	67	%	41-130		1	10/28/16 08:00	10/31/16 13:39	321-60-8	
Phenol-d6 (S)	33	%	15-130		1	10/28/16 08:00	10/31/16 13:39	13127-88-3	
2,4,6-Tribromophenol (S)	93	%	42-140		1	10/28/16 08:00	10/31/16 13:39	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 17:39	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/26/16 17:39	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 17:39	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 17:39	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/26/16 17:39	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/26/16 17:39	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/26/16 17:39	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 17:39	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/26/16 17:39	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/26/16 17:39	75-01-4	
Surrogates									
Toluene-d8 (S)	91	%	70-130		10		10/26/16 17:39	2037-26-5	
4-Bromofluorobenzene (S)	84	%	70-130		10		10/26/16 17:39	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		10		10/26/16 17:39	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.1**	%	0.10	0.10	1		10/26/16 15:18		

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 5 **Lab ID: 1277470005** Collected: 10/19/16 13:50 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.8**	mg/kg	5.6	2.8	1	10/24/16 06:30	10/24/16 11:59		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.13**	mg/kg	0.072	0.022	5	10/28/16 09:16	10/31/16 09:29	83-32-9	
Acenaphthylene	**0.030J**	mg/kg	0.062	0.018	5	10/28/16 09:16	10/31/16 09:29	208-96-8	
Anthracene	**0.35**	mg/kg	0.11	0.032	5	10/28/16 09:16	10/31/16 09:29	120-12-7	
Benzo(a)anthracene	**0.56**	mg/kg	0.059	0.018	5	10/28/16 09:16	10/31/16 09:29	56-55-3	
Benzo(a)pyrene	**0.56**	mg/kg	0.047	0.014	5	10/28/16 09:16	10/31/16 09:29	50-32-8	
Benzo(b)fluoranthene	**0.69**	mg/kg	0.053	0.016	5	10/28/16 09:16	10/31/16 09:29	205-99-2	
Benzo(g,h,i)perylene	**0.33**	mg/kg	0.038	0.011	5	10/28/16 09:16	10/31/16 09:29	191-24-2	
Benzo(k)fluoranthene	**0.30**	mg/kg	0.047	0.014	5	10/28/16 09:16	10/31/16 09:29	207-08-9	
Chrysene	**0.70**	mg/kg	0.063	0.019	5	10/28/16 09:16	10/31/16 09:29	218-01-9	
Dibenz(a,h)anthracene	**0.075**	mg/kg	0.042	0.013	5	10/28/16 09:16	10/31/16 09:29	53-70-3	
Fluoranthene	**1.6**	mg/kg	0.098	0.029	5	10/28/16 09:16	10/31/16 09:29	206-44-0	
Fluorene	**0.15**	mg/kg	0.077	0.023	5	10/28/16 09:16	10/31/16 09:29	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.29**	mg/kg	0.041	0.012	5	10/28/16 09:16	10/31/16 09:29	193-39-5	
Naphthalene	**0.27**	mg/kg	0.16	0.047	5	10/28/16 09:16	10/31/16 09:29	91-20-3	
Phenanthrene	**1.5**	mg/kg	0.22	0.065	5	10/28/16 09:16	10/31/16 09:29	85-01-8	
Pyrene	**1.4**	mg/kg	0.084	0.025	5	10/28/16 09:16	10/31/16 09:29	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	26-130		5	10/28/16 09:16	10/31/16 09:29	321-60-8	
Terphenyl-d14 (S)	77	%	10-130		5	10/28/16 09:16	10/31/16 09:29	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	10/28/16 08:00	10/31/16 14:01	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	10/28/16 08:00	10/31/16 14:01	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	10/28/16 08:00	10/31/16 14:01	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	10/28/16 08:00	10/31/16 14:01	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	10/28/16 08:00	10/31/16 14:01	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	10/28/16 08:00	10/31/16 14:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	10/28/16 08:00	10/31/16 14:01		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	10/28/16 08:00	10/31/16 14:01	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	10/28/16 08:00	10/31/16 14:01	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	10/28/16 08:00	10/31/16 14:01	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	10/28/16 08:00	10/31/16 14:01	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	10/28/16 08:00	10/31/16 14:01	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	80	%	43-130		1	10/28/16 08:00	10/31/16 14:01	4165-60-0	
2-Fluorobiphenyl (S)	70	%	41-130		1	10/28/16 08:00	10/31/16 14:01	321-60-8	
Phenol-d6 (S)	33	%	15-130		1	10/28/16 08:00	10/31/16 14:01	13127-88-3	
2,4,6-Tribromophenol (S)	95	%	42-140		1	10/28/16 08:00	10/31/16 14:01	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 18:02	71-43-2	

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 5 **Lab ID: 1277470005** Collected: 10/19/16 13:50 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/25/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/26/16 18:02	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 18:02	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 18:02	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/26/16 18:02	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/26/16 18:02	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/26/16 18:02	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/26/16 18:02	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/26/16 18:02	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/26/16 18:02	75-01-4	
Surrogates									
Toluene-d8 (S)	91	%	70-130		10		10/26/16 18:02	2037-26-5	
4-Bromofluorobenzene (S)	85	%	70-130		10		10/26/16 18:02	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		10		10/26/16 18:02	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.8**	%	0.10	0.10	1		10/26/16 15:48		

Sample: WWTP 6 **Lab ID: 1277470006** Collected: 10/19/16 13:54 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.8**	mg/kg	5.7	2.8	1	10/24/16 06:30	10/24/16 12:24		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.13**	mg/kg	0.073	0.022	5	10/28/16 09:16	11/02/16 01:05	83-32-9	
Acenaphthylene	**0.023J**	mg/kg	0.062	0.019	5	10/28/16 09:16	11/02/16 01:05	208-96-8	
Anthracene	**0.36**	mg/kg	0.11	0.032	5	10/28/16 09:16	11/02/16 01:05	120-12-7	
Benzo(a)anthracene	**0.73**	mg/kg	0.060	0.018	5	10/28/16 09:16	11/02/16 01:05	56-55-3	
Benzo(a)pyrene	**0.75**	mg/kg	0.048	0.014	5	10/28/16 09:16	11/02/16 01:05	50-32-8	
Benzo(b)fluoranthene	**1.1**	mg/kg	0.053	0.016	5	10/28/16 09:16	11/02/16 01:05	205-99-2	
Benzo(g,h,i)perylene	**0.17**	mg/kg	0.038	0.012	5	10/28/16 09:16	11/02/16 01:05	191-24-2	
Benzo(k)fluoranthene	**0.49**	mg/kg	0.047	0.014	5	10/28/16 09:16	11/02/16 01:05	207-08-9	
Chrysene	**0.81**	mg/kg	0.064	0.019	5	10/28/16 09:16	11/02/16 01:05	218-01-9	
Dibenz(a,h)anthracene	**0.060**	mg/kg	0.042	0.013	5	10/28/16 09:16	11/02/16 01:05	53-70-3	
Fluoranthene	**1.6**	mg/kg	0.099	0.030	5	10/28/16 09:16	11/02/16 01:05	206-44-0	
Fluorene	**0.14**	mg/kg	0.078	0.023	5	10/28/16 09:16	11/02/16 01:05	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.18**	mg/kg	0.042	0.012	5	10/28/16 09:16	11/02/16 01:05	193-39-5	
Naphthalene	**0.22**	mg/kg	0.16	0.048	5	10/28/16 09:16	11/02/16 01:05	91-20-3	
Phenanthrene	**1.3**	mg/kg	0.22	0.066	5	10/28/16 09:16	11/02/16 01:05	85-01-8	
Pyrene	**1.5**	mg/kg	0.085	0.026	5	10/28/16 09:16	11/02/16 01:05	129-00-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 6 **Lab ID: 1277470006** Collected: 10/19/16 13:54 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	66	%	26-130		5	10/28/16 09:16	11/02/16 01:05	321-60-8	
Terphenyl-d14 (S)	80	%	10-130		5	10/28/16 09:16	11/02/16 01:05	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 11:26	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 11:26	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 11:26	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 11:26	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 11:26	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 11:26	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 11:26		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 11:26	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 11:26	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 11:26	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 11:26	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 11:26	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	54	%	43-130		1	11/01/16 08:00	11/02/16 11:26	4165-60-0	
2-Fluorobiphenyl (S)	53	%	41-130		1	11/01/16 08:00	11/02/16 11:26	321-60-8	
Phenol-d6 (S)	25	%	15-130		1	11/01/16 08:00	11/02/16 11:26	13127-88-3	
2,4,6-Tribromophenol (S)	52	%	42-140		1	11/01/16 08:00	11/02/16 11:26	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 14:33	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 14:33	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 14:33	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 14:33	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 14:33	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 14:33	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 14:33	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 14:33	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 14:33	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 14:33	75-01-4	
Surrogates									
Toluene-d8 (S)	93	%	70-130		10		10/28/16 14:33	2037-26-5	
4-Bromofluorobenzene (S)	85	%	70-130		10		10/28/16 14:33	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		10		10/28/16 14:33	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**11.9**	%	0.10	0.10	1		10/26/16 15:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 7 **Lab ID: 1277470007** Collected: 10/19/16 13:57 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<3.2**	mg/kg	6.3	3.2	1	10/24/16 06:30	10/24/16 12:50		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.0094J**	mg/kg	0.016	0.0049	1	10/28/16 09:16	10/28/16 18:48	83-32-9	
Acenaphthylene	**<0.0042**	mg/kg	0.014	0.0042	1	10/28/16 09:16	10/28/16 18:48	208-96-8	
Anthracene	**0.023J**	mg/kg	0.024	0.0073	1	10/28/16 09:16	10/28/16 18:48	120-12-7	
Benzo(a)anthracene	**0.057**	mg/kg	0.013	0.0040	1	10/28/16 09:16	10/28/16 18:48	56-55-3	
Benzo(a)pyrene	**0.068**	mg/kg	0.011	0.0032	1	10/28/16 09:16	10/28/16 18:48	50-32-8	
Benzo(b)fluoranthene	**0.075**	mg/kg	0.012	0.0036	1	10/28/16 09:16	10/28/16 18:48	205-99-2	
Benzo(g,h,i)perylene	**0.037**	mg/kg	0.0086	0.0026	1	10/28/16 09:16	10/28/16 18:48	191-24-2	
Benzo(k)fluoranthene	**0.034**	mg/kg	0.011	0.0032	1	10/28/16 09:16	10/28/16 18:48	207-08-9	
Chrysene	**0.076**	mg/kg	0.014	0.0043	1	10/28/16 09:16	10/28/16 18:48	218-01-9	
Dibenz(a,h)anthracene	**0.0081J**	mg/kg	0.0095	0.0028	1	10/28/16 09:16	10/28/16 18:48	53-70-3	
Fluoranthene	**0.12**	mg/kg	0.022	0.0066	1	10/28/16 09:16	10/28/16 18:48	206-44-0	
Fluorene	**0.0077J**	mg/kg	0.018	0.0053	1	10/28/16 09:16	10/28/16 18:48	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.033**	mg/kg	0.0093	0.0028	1	10/28/16 09:16	10/28/16 18:48	193-39-5	
Naphthalene	**0.019J**	mg/kg	0.036	0.011	1	10/28/16 09:16	10/28/16 18:48	91-20-3	
Phenanthrene	**0.084**	mg/kg	0.049	0.015	1	10/28/16 09:16	10/28/16 18:48	85-01-8	
Pyrene	**0.12**	mg/kg	0.019	0.0057	1	10/28/16 09:16	10/28/16 18:48	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	58	%	26-130		1	10/28/16 09:16	10/28/16 18:48	321-60-8	
Terphenyl-d14 (S)	61	%	10-130		1	10/28/16 09:16	10/28/16 18:48	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 12:30	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 12:30	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 12:30	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 12:30	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 12:30	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 12:30	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 12:30		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 12:30	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 12:30	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 12:30	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 12:30	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 12:30	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	70	%	43-130		1	11/01/16 08:00	11/02/16 12:30	4165-60-0	
2-Fluorobiphenyl (S)	64	%	41-130		1	11/01/16 08:00	11/02/16 12:30	321-60-8	
Phenol-d6 (S)	30	%	15-130		1	11/01/16 08:00	11/02/16 12:30	13127-88-3	
2,4,6-Tribromophenol (S)	75	%	42-140		1	11/01/16 08:00	11/02/16 12:30	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 14:55	71-43-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 7 **Lab ID: 1277470007** Collected: 10/19/16 13:57 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 14:55	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 14:55	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 14:55	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 14:55	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 14:55	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 14:55	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 14:55	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 14:55	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 14:55	75-01-4	
Surrogates									
Toluene-d8 (S)	93	%	70-130		10		10/28/16 14:55	2037-26-5	
4-Bromofluorobenzene (S)	81	%	70-130		10		10/28/16 14:55	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		10		10/28/16 14:55	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.2**	%	0.10	0.10	1		10/26/16 15:48		

Sample: WWTP 8 **Lab ID: 1277470008** Collected: 10/19/16 14:02 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<3.3**	mg/kg	6.7	3.3	1	10/24/16 06:30	10/24/16 13:16		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.015J**	mg/kg	0.017	0.0052	1	10/28/16 09:16	10/28/16 19:05	83-32-9	
Acenaphthylene	**<0.0044**	mg/kg	0.015	0.0044	1	10/28/16 09:16	10/28/16 19:05	208-96-8	
Anthracene	**0.040**	mg/kg	0.025	0.0076	1	10/28/16 09:16	10/28/16 19:05	120-12-7	
Benzo(a)anthracene	**0.061**	mg/kg	0.014	0.0042	1	10/28/16 09:16	10/28/16 19:05	56-55-3	
Benzo(a)pyrene	**0.061**	mg/kg	0.011	0.0033	1	10/28/16 09:16	10/28/16 19:05	50-32-8	
Benzo(b)fluoranthene	**0.074**	mg/kg	0.013	0.0038	1	10/28/16 09:16	10/28/16 19:05	205-99-2	
Benzo(g,h,i)perylene	**0.032**	mg/kg	0.0090	0.0027	1	10/28/16 09:16	10/28/16 19:05	191-24-2	
Benzo(k)fluoranthene	**0.035**	mg/kg	0.011	0.0033	1	10/28/16 09:16	10/28/16 19:05	207-08-9	
Chrysene	**0.081**	mg/kg	0.015	0.0045	1	10/28/16 09:16	10/28/16 19:05	218-01-9	
Dibenz(a,h)anthracene	**0.0088J**	mg/kg	0.0099	0.0030	1	10/28/16 09:16	10/28/16 19:05	53-70-3	
Fluoranthene	**0.17**	mg/kg	0.023	0.0069	1	10/28/16 09:16	10/28/16 19:05	206-44-0	
Fluorene	**0.017J**	mg/kg	0.018	0.0055	1	10/28/16 09:16	10/28/16 19:05	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.029**	mg/kg	0.0098	0.0029	1	10/28/16 09:16	10/28/16 19:05	193-39-5	
Naphthalene	**0.18**	mg/kg	0.037	0.011	1	10/28/16 09:16	10/28/16 19:05	91-20-3	
Phenanthrene	**0.15**	mg/kg	0.052	0.016	1	10/28/16 09:16	10/28/16 19:05	85-01-8	
Pyrene	**0.14**	mg/kg	0.020	0.0060	1	10/28/16 09:16	10/28/16 19:05	129-00-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 8 **Lab ID: 1277470008** Collected: 10/19/16 14:02 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	62	%	26-130		1	10/28/16 09:16	10/28/16 19:05	321-60-8	
Terphenyl-d14 (S)	67	%	10-130		1	10/28/16 09:16	10/28/16 19:05	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 12:52	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 12:52	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 12:52	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 12:52	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 12:52	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 12:52	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 12:52		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 12:52	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 12:52	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 12:52	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 12:52	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 12:52	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	64	%	43-130		1	11/01/16 08:00	11/02/16 12:52	4165-60-0	
2-Fluorobiphenyl (S)	63	%	41-130		1	11/01/16 08:00	11/02/16 12:52	321-60-8	
Phenol-d6 (S)	28	%	15-130		1	11/01/16 08:00	11/02/16 12:52	13127-88-3	
2,4,6-Tribromophenol (S)	62	%	42-140		1	11/01/16 08:00	11/02/16 12:52	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 15:18	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 15:18	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 15:18	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 15:18	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 15:18	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 15:18	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 15:18	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 15:18	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 15:18	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 15:18	75-01-4	
Surrogates									
Toluene-d8 (S)	90	%	70-130		10		10/28/16 15:18	2037-26-5	
4-Bromofluorobenzene (S)	79	%	70-130		10		10/28/16 15:18	460-00-4	
Dibromofluoromethane (S)	94	%	70-130		10		10/28/16 15:18	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.9**	%	0.10	0.10	1		10/26/16 15:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 9 **Lab ID: 1277470009** Collected: 10/19/16 14:07 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.7**	mg/kg	5.4	2.7	1	10/24/16 06:30	10/24/16 13:41		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.039**	mg/kg	0.028	0.0084	2	10/28/16 09:16	11/02/16 01:22	83-32-9	
Acenaphthylene	**0.027**	mg/kg	0.024	0.0072	2	10/28/16 09:16	11/02/16 01:22	208-96-8	
Anthracene	**0.11**	mg/kg	0.041	0.012	2	10/28/16 09:16	11/02/16 01:22	120-12-7	
Benzo(a)anthracene	**0.21**	mg/kg	0.023	0.0069	2	10/28/16 09:16	11/02/16 01:22	56-55-3	
Benzo(a)pyrene	**0.24**	mg/kg	0.018	0.0055	2	10/28/16 09:16	11/02/16 01:22	50-32-8	
Benzo(b)fluoranthene	**0.34**	mg/kg	0.020	0.0061	2	10/28/16 09:16	11/02/16 01:22	205-99-2	
Benzo(g,h,i)perylene	**0.058**	mg/kg	0.015	0.0044	2	10/28/16 09:16	11/02/16 01:22	191-24-2	
Benzo(k)fluoranthene	**0.15**	mg/kg	0.018	0.0054	2	10/28/16 09:16	11/02/16 01:22	207-08-9	
Chrysene	**0.26**	mg/kg	0.024	0.0073	2	10/28/16 09:16	11/02/16 01:22	218-01-9	
Dibenz(a,h)anthracene	**0.018**	mg/kg	0.016	0.0049	2	10/28/16 09:16	11/02/16 01:22	53-70-3	
Fluoranthene	**0.49**	mg/kg	0.038	0.011	2	10/28/16 09:16	11/02/16 01:22	206-44-0	
Fluorene	**0.044**	mg/kg	0.030	0.0090	2	10/28/16 09:16	11/02/16 01:22	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.060**	mg/kg	0.016	0.0048	2	10/28/16 09:16	11/02/16 01:22	193-39-5	
Naphthalene	**0.075**	mg/kg	0.061	0.018	2	10/28/16 09:16	11/02/16 01:22	91-20-3	
Phenanthrene	**0.43**	mg/kg	0.084	0.025	2	10/28/16 09:16	11/02/16 01:22	85-01-8	
Pyrene	**0.52**	mg/kg	0.033	0.0098	2	10/28/16 09:16	11/02/16 01:22	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69	%	26-130		2	10/28/16 09:16	11/02/16 01:22	321-60-8	
Terphenyl-d14 (S)	83	%	10-130		2	10/28/16 09:16	11/02/16 01:22	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 13:13	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 13:13	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 13:13	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 13:13	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 13:13	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 13:13	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 13:13		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 13:13	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 13:13	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 13:13	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 13:13	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 13:13	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	70	%	43-130		1	11/01/16 08:00	11/02/16 13:13	4165-60-0	
2-Fluorobiphenyl (S)	67	%	41-130		1	11/01/16 08:00	11/02/16 13:13	321-60-8	
Phenol-d6 (S)	28	%	15-130		1	11/01/16 08:00	11/02/16 13:13	13127-88-3	
2,4,6-Tribromophenol (S)	56	%	42-140		1	11/01/16 08:00	11/02/16 13:13	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 15:41	71-43-2	

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 9 **Lab ID: 1277470009** Collected: 10/19/16 14:07 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 15:41	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 15:41	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 15:41	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 15:41	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 15:41	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 15:41	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 15:41	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 15:41	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 15:41	75-01-4	
Surrogates									
Toluene-d8 (S)	92	%	70-130		10		10/28/16 15:41	2037-26-5	
4-Bromofluorobenzene (S)	80	%	70-130		10		10/28/16 15:41	460-00-4	
Dibromofluoromethane (S)	93	%	70-130		10		10/28/16 15:41	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.9**	%	0.10	0.10	1		10/26/16 15:48		

Sample: WWTP 10 **Lab ID: 1277470010** Collected: 10/19/16 14:22 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<3.0**	mg/kg	6.0	3.0	1	10/24/16 06:30	10/24/16 14:07		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.016**	mg/kg	0.015	0.0046	1	10/28/16 09:16	11/02/16 01:39	83-32-9	
Acenaphthylene	**0.0092J**	mg/kg	0.013	0.0039	1	10/28/16 09:16	11/02/16 01:39	208-96-8	
Anthracene	**0.041**	mg/kg	0.023	0.0068	1	10/28/16 09:16	11/02/16 01:39	120-12-7	
Benzo(a)anthracene	**0.094**	mg/kg	0.013	0.0038	1	10/28/16 09:16	11/02/16 01:39	56-55-3	
Benzo(a)pyrene	**0.096**	mg/kg	0.010	0.0030	1	10/28/16 09:16	11/02/16 01:39	50-32-8	
Benzo(b)fluoranthene	**0.14**	mg/kg	0.011	0.0034	1	10/28/16 09:16	11/02/16 01:39	205-99-2	
Benzo(g,h,i)perylene	**0.027**	mg/kg	0.0081	0.0024	1	10/28/16 09:16	11/02/16 01:39	191-24-2	
Benzo(k)fluoranthene	**0.065**	mg/kg	0.010	0.0030	1	10/28/16 09:16	11/02/16 01:39	207-08-9	
Chrysene	**0.10**	mg/kg	0.013	0.0040	1	10/28/16 09:16	11/02/16 01:39	218-01-9	
Dibenz(a,h)anthracene	**0.0084J**	mg/kg	0.0089	0.0027	1	10/28/16 09:16	11/02/16 01:39	53-70-3	
Fluoranthene	**0.19**	mg/kg	0.021	0.0062	1	10/28/16 09:16	11/02/16 01:39	206-44-0	
Fluorene	**0.016J**	mg/kg	0.016	0.0049	1	10/28/16 09:16	11/02/16 01:39	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.027**	mg/kg	0.0087	0.0026	1	10/28/16 09:16	11/02/16 01:39	193-39-5	
Naphthalene	**0.083**	mg/kg	0.033	0.010	1	10/28/16 09:16	11/02/16 01:39	91-20-3	
Phenanthrene	**0.16**	mg/kg	0.046	0.014	1	10/28/16 09:16	11/02/16 01:39	85-01-8	
Pyrene	**0.19**	mg/kg	0.018	0.0054	1	10/28/16 09:16	11/02/16 01:39	129-00-0	

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 10 **Lab ID: 1277470010** Collected: 10/19/16 14:22 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	60	%	26-130		1	10/28/16 09:16	11/02/16 01:39	321-60-8	
Terphenyl-d14 (S)	75	%	10-130		1	10/28/16 09:16	11/02/16 01:39	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 13:35	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 13:35	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 13:35	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 13:35	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 13:35	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 13:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 13:35		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 13:35	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 13:35	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 13:35	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 13:35	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 13:35	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	65	%	43-130		1	11/01/16 08:00	11/02/16 13:35	4165-60-0	
2-Fluorobiphenyl (S)	67	%	41-130		1	11/01/16 08:00	11/02/16 13:35	321-60-8	
Phenol-d6 (S)	25	%	15-130		1	11/01/16 08:00	11/02/16 13:35	13127-88-3	
2,4,6-Tribromophenol (S)	59	%	42-140		1	11/01/16 08:00	11/02/16 13:35	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:03	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 16:03	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:03	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:03	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 16:03	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 16:03	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 16:03	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:03	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 16:03	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 16:03	75-01-4	
Surrogates									
Toluene-d8 (S)	92	%	70-130		10		10/28/16 16:03	2037-26-5	
4-Bromofluorobenzene (S)	78	%	70-130		10		10/28/16 16:03	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		10		10/28/16 16:03	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.0**	%	0.10	0.10	1		10/26/16 15:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 11 **Lab ID: 1277470011** Collected: 10/19/16 14:25 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<3.0**	mg/kg	6.0	3.0	1	10/24/16 06:30	10/24/16 14:58		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.068**	mg/kg	0.015	0.0047	1	10/28/16 09:16	10/28/16 19:22	83-32-9	
Acenaphthylene	**0.012J**	mg/kg	0.013	0.0040	1	10/28/16 09:16	10/28/16 19:22	208-96-8	
Anthracene	**0.13**	mg/kg	0.023	0.0068	1	10/28/16 09:16	10/28/16 19:22	120-12-7	
Benzo(a)anthracene	**0.22**	mg/kg	0.013	0.0038	1	10/28/16 09:16	10/28/16 19:22	56-55-3	
Benzo(a)pyrene	**0.21**	mg/kg	0.010	0.0030	1	10/28/16 09:16	10/28/16 19:22	50-32-8	
Benzo(b)fluoranthene	**0.24**	mg/kg	0.011	0.0034	1	10/28/16 09:16	10/28/16 19:22	205-99-2	
Benzo(g,h,i)perylene	**0.11**	mg/kg	0.0081	0.0024	1	10/28/16 09:16	10/28/16 19:22	191-24-2	
Benzo(k)fluoranthene	**0.11**	mg/kg	0.010	0.0030	1	10/28/16 09:16	10/28/16 19:22	207-08-9	
Chrysene	**0.25**	mg/kg	0.013	0.0040	1	10/28/16 09:16	10/28/16 19:22	218-01-9	
Dibenz(a,h)anthracene	**0.030**	mg/kg	0.0089	0.0027	1	10/28/16 09:16	10/28/16 19:22	53-70-3	
Fluoranthene	**0.49**	mg/kg	0.021	0.0062	1	10/28/16 09:16	10/28/16 19:22	206-44-0	
Fluorene	**0.060**	mg/kg	0.017	0.0050	1	10/28/16 09:16	10/28/16 19:22	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.093**	mg/kg	0.0088	0.0026	1	10/28/16 09:16	10/28/16 19:22	193-39-5	
Naphthalene	**0.17**	mg/kg	0.034	0.010	1	10/28/16 09:16	10/28/16 19:22	91-20-3	
Phenanthrene	**0.51**	mg/kg	0.047	0.014	1	10/28/16 09:16	10/28/16 19:22	85-01-8	
Pyrene	**0.48**	mg/kg	0.018	0.0054	1	10/28/16 09:16	10/28/16 19:22	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	56	%	26-130		1	10/28/16 09:16	10/28/16 19:22	321-60-8	
Terphenyl-d14 (S)	60	%	10-130		1	10/28/16 09:16	10/28/16 19:22	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 13:57	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 13:57	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 13:57	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 13:57	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 13:57	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 13:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 13:57		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 13:57	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 13:57	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 13:57	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 13:57	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 13:57	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	67	%	43-130		1	11/01/16 08:00	11/02/16 13:57	4165-60-0	
2-Fluorobiphenyl (S)	64	%	41-130		1	11/01/16 08:00	11/02/16 13:57	321-60-8	
Phenol-d6 (S)	24	%	15-130		1	11/01/16 08:00	11/02/16 13:57	13127-88-3	
2,4,6-Tribromophenol (S)	52	%	42-140		1	11/01/16 08:00	11/02/16 13:57	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:25	71-43-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 11 **Lab ID: 1277470011** Collected: 10/19/16 14:25 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 16:25	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:25	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:25	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 16:25	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 16:25	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 16:25	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:25	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 16:25	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 16:25	75-01-4	
Surrogates									
Toluene-d8 (S)	95	%	70-130		10		10/28/16 16:25	2037-26-5	
4-Bromofluorobenzene (S)	79	%	70-130		10		10/28/16 16:25	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		10		10/28/16 16:25	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.6**	%	0.10	0.10	1		10/26/16 15:48		

Sample: WWTP 12 **Lab ID: 1277470012** Collected: 10/19/16 14:30 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.8**	mg/kg	5.7	2.8	1	10/24/16 06:30	10/24/16 15:24		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.24**	mg/kg	0.12	0.035	8	10/28/16 09:16	10/31/16 09:46	83-32-9	
Acenaphthylene	**<0.030**	mg/kg	0.10	0.030	8	10/28/16 09:16	10/31/16 09:46	208-96-8	
Anthracene	**0.53**	mg/kg	0.17	0.052	8	10/28/16 09:16	10/31/16 09:46	120-12-7	
Benzo(a)anthracene	**0.89**	mg/kg	0.096	0.029	8	10/28/16 09:16	10/31/16 09:46	56-55-3	
Benzo(a)pyrene	**0.91**	mg/kg	0.076	0.023	8	10/28/16 09:16	10/31/16 09:46	50-32-8	
Benzo(b)fluoranthene	**1.1**	mg/kg	0.085	0.026	8	10/28/16 09:16	10/31/16 09:46	205-99-2	
Benzo(g,h,i)perylene	**0.55**	mg/kg	0.061	0.018	8	10/28/16 09:16	10/31/16 09:46	191-24-2	
Benzo(k)fluoranthene	**0.56**	mg/kg	0.076	0.023	8	10/28/16 09:16	10/31/16 09:46	207-08-9	
Chrysene	**1.1**	mg/kg	0.10	0.031	8	10/28/16 09:16	10/31/16 09:46	218-01-9	
Dibenz(a,h)anthracene	**0.12**	mg/kg	0.068	0.020	8	10/28/16 09:16	10/31/16 09:46	53-70-3	
Fluoranthene	**2.5**	mg/kg	0.16	0.047	8	10/28/16 09:16	10/31/16 09:46	206-44-0	
Fluorene	**0.23**	mg/kg	0.13	0.038	8	10/28/16 09:16	10/31/16 09:46	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.49**	mg/kg	0.067	0.020	8	10/28/16 09:16	10/31/16 09:46	193-39-5	
Naphthalene	**0.20J**	mg/kg	0.26	0.076	8	10/28/16 09:16	10/31/16 09:46	91-20-3	
Phenanthrene	**2.4**	mg/kg	0.35	0.11	8	10/28/16 09:16	10/31/16 09:46	85-01-8	
Pyrene	**2.0**	mg/kg	0.14	0.041	8	10/28/16 09:16	10/31/16 09:46	129-00-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 12 **Lab ID: 1277470012** Collected: 10/19/16 14:30 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	64	%	26-130		8	10/28/16 09:16	10/31/16 09:46	321-60-8	
Terphenyl-d14 (S)	70	%	10-130		8	10/28/16 09:16	10/31/16 09:46	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 14:18	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 14:18	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 14:18	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 14:18	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 14:18	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 14:18	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 14:18		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 14:18	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 14:18	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 14:18	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 14:18	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 14:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	71	%	43-130		1	11/01/16 08:00	11/02/16 14:18	4165-60-0	
2-Fluorobiphenyl (S)	67	%	41-130		1	11/01/16 08:00	11/02/16 14:18	321-60-8	
Phenol-d6 (S)	29	%	15-130		1	11/01/16 08:00	11/02/16 14:18	13127-88-3	
2,4,6-Tribromophenol (S)	65	%	42-140		1	11/01/16 08:00	11/02/16 14:18	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:48	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 16:48	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:48	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:48	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 16:48	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 16:48	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 16:48	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 16:48	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 16:48	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 16:48	75-01-4	
Surrogates									
Toluene-d8 (S)	95	%	70-130		10		10/28/16 16:48	2037-26-5	
4-Bromofluorobenzene (S)	78	%	70-130		10		10/28/16 16:48	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		10		10/28/16 16:48	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**11.9**	%	0.10	0.10	1		10/26/16 15:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 13 **Lab ID: 1277470013** Collected: 10/19/16 14:38 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.7**	mg/kg	5.4	2.7	1	10/24/16 06:30	10/24/16 15:50		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**<0.0042**	mg/kg	0.014	0.0042	1	10/28/16 09:16	10/31/16 08:20	83-32-9	
Acenaphthylene	**<0.0036**	mg/kg	0.012	0.0036	1	10/28/16 09:16	10/31/16 08:20	208-96-8	
Anthracene	**0.012J**	mg/kg	0.021	0.0062	1	10/28/16 09:16	10/31/16 08:20	120-12-7	
Benzo(a)anthracene	**0.026**	mg/kg	0.011	0.0034	1	10/28/16 09:16	10/31/16 08:20	56-55-3	
Benzo(a)pyrene	**0.026**	mg/kg	0.0091	0.0027	1	10/28/16 09:16	10/31/16 08:20	50-32-8	
Benzo(b)fluoranthene	**0.032**	mg/kg	0.010	0.0031	1	10/28/16 09:16	10/31/16 08:20	205-99-2	
Benzo(g,h,i)perylene	**0.016**	mg/kg	0.0073	0.0022	1	10/28/16 09:16	10/31/16 08:20	191-24-2	
Benzo(k)fluoranthene	**0.019**	mg/kg	0.0091	0.0027	1	10/28/16 09:16	10/31/16 08:20	207-08-9	
Chrysene	**0.039**	mg/kg	0.012	0.0037	1	10/28/16 09:16	10/31/16 08:20	218-01-9	
Dibenz(a,h)anthracene	**0.0029J**	mg/kg	0.0081	0.0024	1	10/28/16 09:16	10/31/16 08:20	53-70-3	
Fluoranthene	**0.064**	mg/kg	0.019	0.0056	1	10/28/16 09:16	10/31/16 08:20	206-44-0	
Fluorene	**<0.0045**	mg/kg	0.015	0.0045	1	10/28/16 09:16	10/31/16 08:20	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.014**	mg/kg	0.0079	0.0024	1	10/28/16 09:16	10/31/16 08:20	193-39-5	
Naphthalene	**0.012J**	mg/kg	0.030	0.0091	1	10/28/16 09:16	10/31/16 08:20	91-20-3	
Phenanthrene	**0.043**	mg/kg	0.042	0.013	1	10/28/16 09:16	10/31/16 08:20	85-01-8	
Pyrene	**0.057**	mg/kg	0.016	0.0049	1	10/28/16 09:16	10/31/16 08:20	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	53	%	26-130		1	10/28/16 09:16	10/31/16 08:20	321-60-8	
Terphenyl-d14 (S)	56	%	10-130		1	10/28/16 09:16	10/31/16 08:20	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 14:40	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 14:40	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 14:40	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 14:40	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 14:40	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 14:40	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 14:40		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 14:40	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 14:40	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 14:40	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 14:40	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 14:40	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	72	%	43-130		1	11/01/16 08:00	11/02/16 14:40	4165-60-0	
2-Fluorobiphenyl (S)	71	%	41-130		1	11/01/16 08:00	11/02/16 14:40	321-60-8	
Phenol-d6 (S)	28	%	15-130		1	11/01/16 08:00	11/02/16 14:40	13127-88-3	
2,4,6-Tribromophenol (S)	59	%	42-140		1	11/01/16 08:00	11/02/16 14:40	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 17:10	71-43-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 13 **Lab ID: 1277470013** Collected: 10/19/16 14:38 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 17:10	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 17:10	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 17:10	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 17:10	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 17:10	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 17:10	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 17:10	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 17:10	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 17:10	75-01-4	
Surrogates									
Toluene-d8 (S)	92	%	70-130		10		10/28/16 17:10	2037-26-5	
4-Bromofluorobenzene (S)	78	%	70-130		10		10/28/16 17:10	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		10		10/28/16 17:10	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.7**	%	0.10	0.10	1		10/26/16 15:48		

Sample: WWTP 14 **Lab ID: 1277470014** Collected: 10/19/16 14:40 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.7**	mg/kg	5.3	2.7	1	10/24/16 06:30	10/24/16 16:16		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**<0.0041**	mg/kg	0.014	0.0041	1	10/28/16 09:16	11/02/16 02:48	83-32-9	
Acenaphthylene	**<0.0035**	mg/kg	0.012	0.0035	1	10/28/16 09:16	11/02/16 02:48	208-96-8	
Anthracene	**0.0077J**	mg/kg	0.020	0.0061	1	10/28/16 09:16	11/02/16 02:48	120-12-7	
Benzo(a)anthracene	**0.024**	mg/kg	0.011	0.0034	1	10/28/16 09:16	11/02/16 02:48	56-55-3	
Benzo(a)pyrene	**0.026**	mg/kg	0.0089	0.0027	1	10/28/16 09:16	11/02/16 02:48	50-32-8	
Benzo(b)fluoranthene	**0.040**	mg/kg	0.010	0.0030	1	10/28/16 09:16	11/02/16 02:48	205-99-2	
Benzo(g,h,i)perylene	**0.0076**	mg/kg	0.0072	0.0022	1	10/28/16 09:16	11/02/16 02:48	191-24-2	
Benzo(k)fluoranthene	**0.017**	mg/kg	0.0089	0.0027	1	10/28/16 09:16	11/02/16 02:48	207-08-9	
Chrysene	**0.028**	mg/kg	0.012	0.0036	1	10/28/16 09:16	11/02/16 02:48	218-01-9	
Dibenz(a,h)anthracene	**<0.0024**	mg/kg	0.0079	0.0024	1	10/28/16 09:16	11/02/16 02:48	53-70-3	
Fluoranthene	**0.046**	mg/kg	0.018	0.0055	1	10/28/16 09:16	11/02/16 02:48	206-44-0	
Fluorene	**<0.0044**	mg/kg	0.015	0.0044	1	10/28/16 09:16	11/02/16 02:48	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.0073J**	mg/kg	0.0078	0.0023	1	10/28/16 09:16	11/02/16 02:48	193-39-5	
Naphthalene	**0.016J**	mg/kg	0.030	0.0089	1	10/28/16 09:16	11/02/16 02:48	91-20-3	
Phenanthrene	**0.032J**	mg/kg	0.041	0.012	1	10/28/16 09:16	11/02/16 02:48	85-01-8	
Pyrene	**0.054**	mg/kg	0.016	0.0048	1	10/28/16 09:16	11/02/16 02:48	129-00-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 14 **Lab ID: 1277470014** Collected: 10/19/16 14:40 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	60	%	26-130		1	10/28/16 09:16	11/02/16 02:48	321-60-8	
Terphenyl-d14 (S)	83	%	10-130		1	10/28/16 09:16	11/02/16 02:48	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/27/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 12:09	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 12:09	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 12:09	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 12:09	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 12:09	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 12:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 12:09		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 12:09	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 12:09	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 12:09	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 12:09	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 12:09	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	63	%	43-130		1	11/01/16 08:00	11/02/16 12:09	4165-60-0	
2-Fluorobiphenyl (S)	53	%	41-130		1	11/01/16 08:00	11/02/16 12:09	321-60-8	
Phenol-d6 (S)	28	%	15-130		1	11/01/16 08:00	11/02/16 12:09	13127-88-3	
2,4,6-Tribromophenol (S)	66	%	42-140		1	11/01/16 08:00	11/02/16 12:09	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/26/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 17:33	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/28/16 17:33	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 17:33	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 17:33	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/28/16 17:33	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/28/16 17:33	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/28/16 17:33	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/28/16 17:33	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/28/16 17:33	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/28/16 17:33	75-01-4	
Surrogates									
Toluene-d8 (S)	91	%	70-130		10		10/28/16 17:33	2037-26-5	
4-Bromofluorobenzene (S)	80	%	70-130		10		10/28/16 17:33	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		10		10/28/16 17:33	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**5.9**	%	0.10	0.10	1		10/26/16 15:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 15 **Lab ID: 1277470015** Collected: 10/19/16 14:50 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.7**	mg/kg	5.4	2.7	1	10/24/16 06:30	10/24/16 16:41		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**<0.0042**	mg/kg	0.014	0.0042	1	10/28/16 09:16	11/02/16 01:56	83-32-9	
Acenaphthylene	**<0.0035**	mg/kg	0.012	0.0035	1	10/28/16 09:16	11/02/16 01:56	208-96-8	
Anthracene	**<0.0061**	mg/kg	0.020	0.0061	1	10/28/16 09:16	11/02/16 01:56	120-12-7	
Benzo(a)anthracene	**0.018**	mg/kg	0.011	0.0034	1	10/28/16 09:16	11/02/16 01:56	56-55-3	
Benzo(a)pyrene	**0.020**	mg/kg	0.0090	0.0027	1	10/28/16 09:16	11/02/16 01:56	50-32-8	
Benzo(b)fluoranthene	**0.032**	mg/kg	0.010	0.0030	1	10/28/16 09:16	11/02/16 01:56	205-99-2	
Benzo(g,h,i)perylene	**0.0078**	mg/kg	0.0073	0.0022	1	10/28/16 09:16	11/02/16 01:56	191-24-2	
Benzo(k)fluoranthene	**0.014**	mg/kg	0.0090	0.0027	1	10/28/16 09:16	11/02/16 01:56	207-08-9	
Chrysene	**0.021**	mg/kg	0.012	0.0036	1	10/28/16 09:16	11/02/16 01:56	218-01-9	
Dibenz(a,h)anthracene	**<0.0024**	mg/kg	0.0080	0.0024	1	10/28/16 09:16	11/02/16 01:56	53-70-3	
Fluoranthene	**0.030**	mg/kg	0.019	0.0056	1	10/28/16 09:16	11/02/16 01:56	206-44-0	
Fluorene	**<0.0044**	mg/kg	0.015	0.0044	1	10/28/16 09:16	11/02/16 01:56	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.0063J**	mg/kg	0.0079	0.0024	1	10/28/16 09:16	11/02/16 01:56	193-39-5	
Naphthalene	**0.013J**	mg/kg	0.030	0.0090	1	10/28/16 09:16	11/02/16 01:56	91-20-3	
Phenanthrene	**0.020J**	mg/kg	0.042	0.012	1	10/28/16 09:16	11/02/16 01:56	85-01-8	
Pyrene	**0.033**	mg/kg	0.016	0.0048	1	10/28/16 09:16	11/02/16 01:56	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%	26-130		1	10/28/16 09:16	11/02/16 01:56	321-60-8	
Terphenyl-d14 (S)	83	%	10-130		1	10/28/16 09:16	11/02/16 01:56	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/27/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 15:01	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 15:01	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 15:01	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 15:01	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 15:01	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 15:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 15:01		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 15:01	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 15:01	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 15:01	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 15:01	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 15:01	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	74	%	43-130		1	11/01/16 08:00	11/02/16 15:01	4165-60-0	
2-Fluorobiphenyl (S)	70	%	41-130		1	11/01/16 08:00	11/02/16 15:01	321-60-8	
Phenol-d6 (S)	29	%	15-130		1	11/01/16 08:00	11/02/16 15:01	13127-88-3	
2,4,6-Tribromophenol (S)	68	%	42-140		1	11/01/16 08:00	11/02/16 15:01	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 16:49	71-43-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 15 **Lab ID: 1277470015** Collected: 10/19/16 14:50 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/25/16 16:49	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 16:49	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 16:49	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/25/16 16:49	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/25/16 16:49	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/25/16 16:49	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 16:49	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/25/16 16:49	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/25/16 16:49	75-01-4	
Surrogates									
Toluene-d8 (S)	97	%	70-130		10		10/25/16 16:49	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-130		10		10/25/16 16:49	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		10		10/25/16 16:49	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**6.8**	%	0.10	0.10	1		10/26/16 15:49		

Sample: WWTP 16 **Lab ID: 1277470016** Collected: 10/19/16 14:47 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<3.0**	mg/kg	6.0	3.0	1	10/24/16 06:30	10/24/16 17:07		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.057**	mg/kg	0.015	0.0046	1	10/28/16 09:16	11/02/16 02:13	83-32-9	
Acenaphthylene	**0.015**	mg/kg	0.013	0.0039	1	10/28/16 09:16	11/02/16 02:13	208-96-8	
Anthracene	**0.078**	mg/kg	0.023	0.0068	1	10/28/16 09:16	11/02/16 02:13	120-12-7	
Benzo(a)anthracene	**0.14**	mg/kg	0.013	0.0038	1	10/28/16 09:16	11/02/16 02:13	56-55-3	
Benzo(a)pyrene	**0.16**	mg/kg	0.010	0.0030	1	10/28/16 09:16	11/02/16 02:13	50-32-8	
Benzo(b)fluoranthene	**0.23**	mg/kg	0.011	0.0034	1	10/28/16 09:16	11/02/16 02:13	205-99-2	
Benzo(g,h,i)perylene	**0.043**	mg/kg	0.0081	0.0024	1	10/28/16 09:16	11/02/16 02:13	191-24-2	
Benzo(k)fluoranthene	**0.091**	mg/kg	0.010	0.0030	1	10/28/16 09:16	11/02/16 02:13	207-08-9	
Chrysene	**0.17**	mg/kg	0.013	0.0040	1	10/28/16 09:16	11/02/16 02:13	218-01-9	
Dibenz(a,h)anthracene	**0.013**	mg/kg	0.0089	0.0027	1	10/28/16 09:16	11/02/16 02:13	53-70-3	
Fluoranthene	**0.32**	mg/kg	0.021	0.0062	1	10/28/16 09:16	11/02/16 02:13	206-44-0	
Fluorene	**0.040**	mg/kg	0.017	0.0050	1	10/28/16 09:16	11/02/16 02:13	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.040**	mg/kg	0.0088	0.0026	1	10/28/16 09:16	11/02/16 02:13	193-39-5	
Naphthalene	**0.14**	mg/kg	0.034	0.010	1	10/28/16 09:16	11/02/16 02:13	91-20-3	
Phenanthrene	**0.29**	mg/kg	0.046	0.014	1	10/28/16 09:16	11/02/16 02:13	85-01-8	
Pyrene	**0.33**	mg/kg	0.018	0.0054	1	10/28/16 09:16	11/02/16 02:13	129-00-0	

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 16 **Lab ID: 1277470016** Collected: 10/19/16 14:47 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Surrogates									
2-Fluorobiphenyl (S)	63	%	26-130		1	10/28/16 09:16	11/02/16 02:13	321-60-8	
Terphenyl-d14 (S)	83	%	10-130		1	10/28/16 09:16	11/02/16 02:13	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/27/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 15:23	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 15:23	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 15:23	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 15:23	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 15:23	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 15:23	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 15:23		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 15:23	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 15:23	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 15:23	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 15:23	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 15:23	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	69	%	43-130		1	11/01/16 08:00	11/02/16 15:23	4165-60-0	
2-Fluorobiphenyl (S)	65	%	41-130		1	11/01/16 08:00	11/02/16 15:23	321-60-8	
Phenol-d6 (S)	21	%	15-130		1	11/01/16 08:00	11/02/16 15:23	13127-88-3	
2,4,6-Tribromophenol (S)	56	%	42-140		1	11/01/16 08:00	11/02/16 15:23	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:11	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/25/16 17:11	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:11	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:11	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/25/16 17:11	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/25/16 17:11	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/25/16 17:11	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:11	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/25/16 17:11	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/25/16 17:11	75-01-4	
Surrogates									
Toluene-d8 (S)	95	%	70-130		10		10/25/16 17:11	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		10		10/25/16 17:11	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		10		10/25/16 17:11	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.4**	%	0.10	0.10	1		10/26/16 15:49		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 17 **Lab ID: 1277470017** Collected: 10/19/16 14:56 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.7**	mg/kg	5.3	2.7	1	10/24/16 06:30	10/24/16 17:33		1V,P4
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.16**	mg/kg	0.069	0.021	5	10/28/16 09:16	10/31/16 10:03	83-32-9	
Acenaphthylene	**<0.018**	mg/kg	0.059	0.018	5	10/28/16 09:16	10/31/16 10:03	208-96-8	
Anthracene	**0.36**	mg/kg	0.10	0.030	5	10/28/16 09:16	10/31/16 10:03	120-12-7	
Benzo(a)anthracene	**0.57**	mg/kg	0.057	0.017	5	10/28/16 09:16	10/31/16 10:03	56-55-3	
Benzo(a)pyrene	**0.55**	mg/kg	0.045	0.013	5	10/28/16 09:16	10/31/16 10:03	50-32-8	
Benzo(b)fluoranthene	**0.65**	mg/kg	0.050	0.015	5	10/28/16 09:16	10/31/16 10:03	205-99-2	
Benzo(g,h,i)perylene	**0.31**	mg/kg	0.036	0.011	5	10/28/16 09:16	10/31/16 10:03	191-24-2	
Benzo(k)fluoranthene	**0.31**	mg/kg	0.045	0.013	5	10/28/16 09:16	10/31/16 10:03	207-08-9	
Chrysene	**0.66**	mg/kg	0.060	0.018	5	10/28/16 09:16	10/31/16 10:03	218-01-9	
Dibenz(a,h)anthracene	**0.073**	mg/kg	0.040	0.012	5	10/28/16 09:16	10/31/16 10:03	53-70-3	
Fluoranthene	**1.6**	mg/kg	0.093	0.028	5	10/28/16 09:16	10/31/16 10:03	206-44-0	
Fluorene	**0.15**	mg/kg	0.074	0.022	5	10/28/16 09:16	10/31/16 10:03	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.28**	mg/kg	0.039	0.012	5	10/28/16 09:16	10/31/16 10:03	193-39-5	
Naphthalene	**0.10J**	mg/kg	0.15	0.045	5	10/28/16 09:16	10/31/16 10:03	91-20-3	
Phenanthrene	**1.5**	mg/kg	0.21	0.062	5	10/28/16 09:16	10/31/16 10:03	85-01-8	
Pyrene	**1.3**	mg/kg	0.080	0.024	5	10/28/16 09:16	10/31/16 10:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%	26-130		5	10/28/16 09:16	10/31/16 10:03	321-60-8	
Terphenyl-d14 (S)	63	%	10-130		5	10/28/16 09:16	10/31/16 10:03	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/27/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	11/01/16 08:00	11/02/16 15:44	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	11/01/16 08:00	11/02/16 15:44	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	11/01/16 08:00	11/02/16 15:44	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	11/01/16 08:00	11/02/16 15:44	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	11/01/16 08:00	11/02/16 15:44	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	11/01/16 08:00	11/02/16 15:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	11/01/16 08:00	11/02/16 15:44		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	11/01/16 08:00	11/02/16 15:44	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	11/01/16 08:00	11/02/16 15:44	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	11/01/16 08:00	11/02/16 15:44	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	11/01/16 08:00	11/02/16 15:44	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	11/01/16 08:00	11/02/16 15:44	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	64	%	43-130		1	11/01/16 08:00	11/02/16 15:44	4165-60-0	
2-Fluorobiphenyl (S)	65	%	41-130		1	11/01/16 08:00	11/02/16 15:44	321-60-8	
Phenol-d6 (S)	25	%	15-130		1	11/01/16 08:00	11/02/16 15:44	13127-88-3	
2,4,6-Tribromophenol (S)	68	%	42-140		1	11/01/16 08:00	11/02/16 15:44	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:33	71-43-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 17 **Lab ID: 1277470017** Collected: 10/19/16 14:56 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/25/16 17:33	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:33	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:33	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/25/16 17:33	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/25/16 17:33	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/25/16 17:33	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:33	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/25/16 17:33	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/25/16 17:33	75-01-4	
Surrogates									
Toluene-d8 (S)	98	%	70-130		10		10/25/16 17:33	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		10		10/25/16 17:33	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		10		10/25/16 17:33	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**6.3**	%	0.10	0.10	1		10/26/16 15:49		

Sample: WWTP 18 **Lab ID: 1277470018** Collected: 10/19/16 15:04 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.9**	mg/kg	5.8	2.9	1	10/24/16 06:30	10/24/16 17:58		1V,P4
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Lead	**0.016J**	mg/L	0.060	0.015	1	10/25/16 14:46	10/26/16 11:33	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.21**	mg/kg	0.075	0.022	5	10/28/16 09:16	10/31/16 10:20	83-32-9	
Acenaphthylene	**0.025J**	mg/kg	0.064	0.019	5	10/28/16 09:16	10/31/16 10:20	208-96-8	
Anthracene	**0.40**	mg/kg	0.11	0.033	5	10/28/16 09:16	10/31/16 10:20	120-12-7	
Benzo(a)anthracene	**0.65**	mg/kg	0.061	0.018	5	10/28/16 09:16	10/31/16 10:20	56-55-3	
Benzo(a)pyrene	**0.62**	mg/kg	0.048	0.015	5	10/28/16 09:16	10/31/16 10:20	50-32-8	
Benzo(b)fluoranthene	**0.77**	mg/kg	0.054	0.016	5	10/28/16 09:16	10/31/16 10:20	205-99-2	
Benzo(g,h,i)perylene	**0.36**	mg/kg	0.039	0.012	5	10/28/16 09:16	10/31/16 10:20	191-24-2	
Benzo(k)fluoranthene	**0.34**	mg/kg	0.048	0.015	5	10/28/16 09:16	10/31/16 10:20	207-08-9	
Chrysene	**0.77**	mg/kg	0.065	0.020	5	10/28/16 09:16	10/31/16 10:20	218-01-9	
Dibenz(a,h)anthracene	**0.085**	mg/kg	0.043	0.013	5	10/28/16 09:16	10/31/16 10:20	53-70-3	
Fluoranthene	**1.8**	mg/kg	0.10	0.030	5	10/28/16 09:16	10/31/16 10:20	206-44-0	
Fluorene	**0.20**	mg/kg	0.080	0.024	5	10/28/16 09:16	10/31/16 10:20	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.31**	mg/kg	0.042	0.013	5	10/28/16 09:16	10/31/16 10:20	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 18 **Lab ID: 1277470018** Collected: 10/19/16 15:04 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Naphthalene	**0.29**	mg/kg	0.16	0.049	5	10/28/16 09:16	10/31/16 10:20	91-20-3	
Phenanthrene	**1.8**	mg/kg	0.22	0.067	5	10/28/16 09:16	10/31/16 10:20	85-01-8	
Pyrene	**1.5**	mg/kg	0.087	0.026	5	10/28/16 09:16	10/31/16 10:20	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	49	%	26-130		5	10/28/16 09:16	10/31/16 10:20	321-60-8	
Terphenyl-d14 (S)	57	%	10-130		5	10/28/16 09:16	10/31/16 10:20	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	10/25/16 08:50	10/26/16 12:13	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	10/25/16 08:50	10/26/16 12:13	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	10/25/16 08:50	10/26/16 12:13	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	10/25/16 08:50	10/26/16 12:13	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	10/25/16 08:50	10/26/16 12:13	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	10/25/16 08:50	10/26/16 12:13	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	10/25/16 08:50	10/26/16 12:13		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	10/25/16 08:50	10/26/16 12:13	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	10/25/16 08:50	10/26/16 12:13	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	10/25/16 08:50	10/26/16 12:13	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	10/25/16 08:50	10/26/16 12:13	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	10/25/16 08:50	10/26/16 12:13	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	97	%	43-130		1	10/25/16 08:50	10/26/16 12:13	4165-60-0	
2-Fluorobiphenyl (S)	96	%	41-130		1	10/25/16 08:50	10/26/16 12:13	321-60-8	
Phenol-d6 (S)	42	%	15-130		1	10/25/16 08:50	10/26/16 12:13	13127-88-3	
2,4,6-Tribromophenol (S)	90	%	42-140		1	10/25/16 08:50	10/26/16 12:13	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:54	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/25/16 17:54	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:54	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:54	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/25/16 17:54	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/25/16 17:54	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/25/16 17:54	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 17:54	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/25/16 17:54	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/25/16 17:54	75-01-4	
Surrogates									
Toluene-d8 (S)	96	%	70-130		10		10/25/16 17:54	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130		10		10/25/16 17:54	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		10		10/25/16 17:54	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**13.7**	%	0.10	0.10	1		10/26/16 15:49		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 18 **Lab ID: 1277470018** Collected: 10/19/16 15:04 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010								
Flashpoint	**>210**	deg F			1		10/27/16 10:45		
9045 pH Soil	Analytical Method: EPA 9045								
pH at 25 Degrees C	**8.11**	Std. Units	0.100	0.0100	1		10/27/16 10:20		H6
9095 Paint Filter Liquid Test	Analytical Method: EPA 9095								
Free Liquids	**Pass**	no units			1		10/28/16 09:08		

Sample: WWTP 19 **Lab ID: 1277470019** Collected: 10/19/16 15:15 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<3.0**	mg/kg	6.0	3.0	1	10/24/16 06:30	10/24/16 18:24		1V,P4
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Lead	**<0.015**	mg/L	0.060	0.015	1	10/25/16 14:46	10/26/16 11:35	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**1.6**	mg/kg	1.2	0.37	80	10/28/16 09:16	10/31/16 10:37	83-32-9	
Acenaphthylene	**<0.32**	mg/kg	1.1	0.32	80	10/28/16 09:16	10/31/16 10:37	208-96-8	
Anthracene	**5.2**	mg/kg	1.8	0.55	80	10/28/16 09:16	10/31/16 10:37	120-12-7	
Benzo(a)anthracene	**5.6**	mg/kg	1.0	0.30	80	10/28/16 09:16	10/31/16 10:37	56-55-3	
Benzo(a)pyrene	**3.7**	mg/kg	0.80	0.24	80	10/28/16 09:16	10/31/16 10:37	50-32-8	
Benzo(b)fluoranthene	**4.9**	mg/kg	0.90	0.27	80	10/28/16 09:16	10/31/16 10:37	205-99-2	
Benzo(g,h,i)perylene	**1.6**	mg/kg	0.65	0.20	80	10/28/16 09:16	10/31/16 10:37	191-24-2	
Benzo(k)fluoranthene	**2.4**	mg/kg	0.80	0.24	80	10/28/16 09:16	10/31/16 10:37	207-08-9	
Chrysene	**6.6**	mg/kg	1.1	0.32	80	10/28/16 09:16	10/31/16 10:37	218-01-9	
Dibenz(a,h)anthracene	**0.34J**	mg/kg	0.72	0.21	80	10/28/16 09:16	10/31/16 10:37	53-70-3	
Fluoranthene	**18.3**	mg/kg	1.7	0.50	80	10/28/16 09:16	10/31/16 10:37	206-44-0	
Fluorene	**1.9**	mg/kg	1.3	0.40	80	10/28/16 09:16	10/31/16 10:37	86-73-7	
Indeno(1,2,3-cd)pyrene	**1.4**	mg/kg	0.70	0.21	80	10/28/16 09:16	10/31/16 10:37	193-39-5	
Naphthalene	**<0.81**	mg/kg	2.7	0.81	80	10/28/16 09:16	10/31/16 10:37	91-20-3	
Phenanthrene	**17.4**	mg/kg	3.7	1.1	80	10/28/16 09:16	10/31/16 10:37	85-01-8	
Pyrene	**15.4**	mg/kg	1.4	0.43	80	10/28/16 09:16	10/31/16 10:37	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%	26-130		80	10/28/16 09:16	10/31/16 10:37	321-60-8	S4
Terphenyl-d14 (S)	0	%	10-130		80	10/28/16 09:16	10/31/16 10:37	1718-51-0	S4

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 19 **Lab ID: 1277470019** Collected: 10/19/16 15:15 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	10/25/16 08:50	10/26/16 12:35	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	10/25/16 08:50	10/26/16 12:35	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	10/25/16 08:50	10/26/16 12:35	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	10/25/16 08:50	10/26/16 12:35	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	10/25/16 08:50	10/26/16 12:35	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	10/25/16 08:50	10/26/16 12:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	10/25/16 08:50	10/26/16 12:35		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	10/25/16 08:50	10/26/16 12:35	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	10/25/16 08:50	10/26/16 12:35	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	10/25/16 08:50	10/26/16 12:35	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	10/25/16 08:50	10/26/16 12:35	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	10/25/16 08:50	10/26/16 12:35	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	91	%	43-130		1	10/25/16 08:50	10/26/16 12:35	4165-60-0	
2-Fluorobiphenyl (S)	92	%	41-130		1	10/25/16 08:50	10/26/16 12:35	321-60-8	
Phenol-d6 (S)	37	%	15-130		1	10/25/16 08:50	10/26/16 12:35	13127-88-3	
2,4,6-Tribromophenol (S)	83	%	42-140		1	10/25/16 08:50	10/26/16 12:35	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 18:16	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/25/16 18:16	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 18:16	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 18:16	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/25/16 18:16	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/25/16 18:16	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/25/16 18:16	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 18:16	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/25/16 18:16	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/25/16 18:16	75-01-4	
Surrogates									
Toluene-d8 (S)	94	%	70-130		10		10/25/16 18:16	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		10		10/25/16 18:16	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		10		10/25/16 18:16	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.8**	%	0.10	0.10	1		10/26/16 15:49		
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010								
Flashpoint	**>210**	deg F			1		10/27/16 11:56		
9045 pH Soil	Analytical Method: EPA 9045								
pH at 25 Degrees C	**8.10**	Std. Units	0.100	0.0100	1		10/27/16 10:20		H6

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 19 **Lab ID: 1277470019** Collected: 10/19/16 15:15 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
9095 Paint Filter Liquid Test	Analytical Method: EPA 9095								
Free Liquids	**Pass**	no units			1		10/28/16 09:10		

Sample: WWTP 20 **Lab ID: 1277470020** Collected: 10/19/16 15:25 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.								
Gasoline Range Organics	**<2.7**	mg/kg	5.4	2.7	1	10/24/16 06:30	10/24/16 18:50		1V,P4
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Lead	**0.021J**	mg/L	0.060	0.015	1	10/25/16 14:46	10/26/16 11:38	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	**0.020J**	mg/kg	0.028	0.0084	2	10/28/16 09:16	11/02/16 02:31	83-32-9	
Acenaphthylene	**0.011J**	mg/kg	0.024	0.0071	2	10/28/16 09:16	11/02/16 02:31	208-96-8	
Anthracene	**0.063**	mg/kg	0.041	0.012	2	10/28/16 09:16	11/02/16 02:31	120-12-7	
Benzo(a)anthracene	**0.16**	mg/kg	0.023	0.0069	2	10/28/16 09:16	11/02/16 02:31	56-55-3	
Benzo(a)pyrene	**0.17**	mg/kg	0.018	0.0054	2	10/28/16 09:16	11/02/16 02:31	50-32-8	
Benzo(b)fluoranthene	**0.25**	mg/kg	0.020	0.0061	2	10/28/16 09:16	11/02/16 02:31	205-99-2	
Benzo(g,h,i)perylene	**0.040**	mg/kg	0.015	0.0044	2	10/28/16 09:16	11/02/16 02:31	191-24-2	
Benzo(k)fluoranthene	**0.11**	mg/kg	0.018	0.0054	2	10/28/16 09:16	11/02/16 02:31	207-08-9	
Chrysene	**0.18**	mg/kg	0.024	0.0073	2	10/28/16 09:16	11/02/16 02:31	218-01-9	
Dibenz(a,h)anthracene	**0.012J**	mg/kg	0.016	0.0048	2	10/28/16 09:16	11/02/16 02:31	53-70-3	
Fluoranthene	**0.32**	mg/kg	0.038	0.011	2	10/28/16 09:16	11/02/16 02:31	206-44-0	
Fluorene	**0.021J**	mg/kg	0.030	0.0090	2	10/28/16 09:16	11/02/16 02:31	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.042**	mg/kg	0.016	0.0048	2	10/28/16 09:16	11/02/16 02:31	193-39-5	
Naphthalene	**0.089**	mg/kg	0.061	0.018	2	10/28/16 09:16	11/02/16 02:31	91-20-3	
Phenanthrene	**0.23**	mg/kg	0.084	0.025	2	10/28/16 09:16	11/02/16 02:31	85-01-8	
Pyrene	**0.33**	mg/kg	0.032	0.0098	2	10/28/16 09:16	11/02/16 02:31	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	53	%	26-130		2	10/28/16 09:16	11/02/16 02:31	321-60-8	
Terphenyl-d14 (S)	70	%	10-130		2	10/28/16 09:16	11/02/16 02:31	1718-51-0	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
1,4-Dichlorobenzene	**<19.4**	ug/L	50.0	19.4	1	10/25/16 08:50	10/26/16 12:56	106-46-7	
2,4-Dinitrotoluene	**<10**	ug/L	50.0	10	1	10/25/16 08:50	10/26/16 12:56	121-14-2	
Hexachloro-1,3-butadiene	**<18.2**	ug/L	100	18.2	1	10/25/16 08:50	10/26/16 12:56	87-68-3	
Hexachlorobenzene	**<5.7**	ug/L	50.0	5.7	1	10/25/16 08:50	10/26/16 12:56	118-74-1	
Hexachloroethane	**<14.8**	ug/L	50.0	14.8	1	10/25/16 08:50	10/26/16 12:56	67-72-1	
2-Methylphenol(o-Cresol)	**<9.6**	ug/L	50.0	9.6	1	10/25/16 08:50	10/26/16 12:56	95-48-7	

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ANALYTICAL RESULTS

Project: WWTP Soil
Pace Project No.: 1277470

Sample: WWTP 20 **Lab ID: 1277470020** Collected: 10/19/16 15:25 Received: 10/20/16 09:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
3&4-Methylphenol(m&p Cresol)	**<12.8**	ug/L	50.0	12.8	1	10/25/16 08:50	10/26/16 12:56		
Nitrobenzene	**<10.3**	ug/L	50.0	10.3	1	10/25/16 08:50	10/26/16 12:56	98-95-3	
Pentachlorophenol	**<7.5**	ug/L	100	7.5	1	10/25/16 08:50	10/26/16 12:56	87-86-5	
Pyridine	**<14.6**	ug/L	50.0	14.6	1	10/25/16 08:50	10/26/16 12:56	110-86-1	
2,4,5-Trichlorophenol	**<7.6**	ug/L	50.0	7.6	1	10/25/16 08:50	10/26/16 12:56	95-95-4	
2,4,6-Trichlorophenol	**<10.5**	ug/L	50.0	10.5	1	10/25/16 08:50	10/26/16 12:56	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	88	%	43-130		1	10/25/16 08:50	10/26/16 12:56	4165-60-0	
2-Fluorobiphenyl (S)	98	%	41-130		1	10/25/16 08:50	10/26/16 12:56	321-60-8	
Phenol-d6 (S)	40	%	15-130		1	10/25/16 08:50	10/26/16 12:56	13127-88-3	
2,4,6-Tribromophenol (S)	80	%	42-140		1	10/25/16 08:50	10/26/16 12:56	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/24/16 00:00								
Benzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 18:37	71-43-2	
2-Butanone (MEK)	**<0.030**	mg/L	0.20	0.030	10		10/25/16 18:37	78-93-3	
Carbon tetrachloride	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 18:37	56-23-5	
Chlorobenzene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 18:37	108-90-7	
Chloroform	**<0.025**	mg/L	0.050	0.025	10		10/25/16 18:37	67-66-3	
1,2-Dichloroethane	**<0.0017**	mg/L	0.010	0.0017	10		10/25/16 18:37	107-06-2	
1,1-Dichloroethene	**<0.0041**	mg/L	0.010	0.0041	10		10/25/16 18:37	75-35-4	
Tetrachloroethene	**<0.0050**	mg/L	0.010	0.0050	10		10/25/16 18:37	127-18-4	
Trichloroethene	**<0.0033**	mg/L	0.010	0.0033	10		10/25/16 18:37	79-01-6	
Vinyl chloride	**<0.0018**	mg/L	0.010	0.0018	10		10/25/16 18:37	75-01-4	
Surrogates									
Toluene-d8 (S)	98	%	70-130		10		10/25/16 18:37	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		10		10/25/16 18:37	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		10		10/25/16 18:37	1868-53-7	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.6**	%	0.10	0.10	1		10/26/16 15:49		
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010								
Flashpoint	**>210**	deg F			1		10/27/16 11:56		
9045 pH Soil	Analytical Method: EPA 9045								
pH at 25 Degrees C	**8.21**	Std. Units	0.100	0.0100	1		10/27/16 10:20		H6
9095 Paint Filter Liquid Test	Analytical Method: EPA 9095								
Free Liquids	**Pass**	no units			1		10/28/16 09:11		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 238980 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004, 1277470005, 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014, 1277470015, 1277470016, 1277470017, 1277470018, 1277470019, 1277470020

METHOD BLANK: 1416306 Matrix: Solid
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004, 1277470005, 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014, 1277470015, 1277470016, 1277470017, 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	<1.6	5.0	10/24/16 08:24	

LABORATORY CONTROL SAMPLE & LCSD: 1416307 1416308

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	10	9.7	10	97	100	80-120	3	20	

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239232 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 1277470018, 1277470019, 1277470020

METHOD BLANK: 1417382 Matrix: Water
Associated Lab Samples: 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/L	<0.0030	0.012	10/26/16 11:04	

METHOD BLANK: 1416309 Matrix: Solid
Associated Lab Samples: 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/L	<0.015	0.060	10/26/16 11:46	

METHOD BLANK: 1416310 Matrix: Solid
Associated Lab Samples: 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/L	<0.0030	0.012	10/26/16 12:06	

METHOD BLANK: 1416311 Matrix: Solid
Associated Lab Samples: 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/L	<0.015	0.060	10/26/16 11:53	

LABORATORY CONTROL SAMPLE: 1417383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/L	.5	0.48	95	80-120	

MATRIX SPIKE SAMPLE: 1417384

Parameter	Units	40140563001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/L	0.0041J	.5	0.47	94	75-125	

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

MATRIX SPIKE SAMPLE: 1417385

Parameter	Units	40140468004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/L	<0.015	2.5	2.3	93	75-125	

MATRIX SPIKE SAMPLE: 1417387

Parameter	Units	40140473001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/L	0.010J	.5	0.48	93	75-125	

MATRIX SPIKE SAMPLE: 1417389

Parameter	Units	40140516001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/L	<0.015	2.5	2.4	96	75-125	

MATRIX SPIKE SAMPLE: 1417390

Parameter	Units	40140516002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/L	<0.015	2.5	2.3	92	75-125	

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239179 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 1277470015, 1277470016, 1277470017, 1277470018, 1277470019, 1277470020

METHOD BLANK: 1417094 Matrix: Water
Associated Lab Samples: 1277470015, 1277470016, 1277470017, 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	<0.00041	0.0010	10/25/16 14:18	
1,2-Dichloroethane	mg/L	<0.00017	0.0010	10/25/16 14:18	
2-Butanone (MEK)	mg/L	<0.0030	0.020	10/25/16 14:18	
Benzene	mg/L	<0.00050	0.0010	10/25/16 14:18	
Carbon tetrachloride	mg/L	<0.00050	0.0010	10/25/16 14:18	
Chlorobenzene	mg/L	<0.00050	0.0010	10/25/16 14:18	
Chloroform	mg/L	<0.0025	0.0050	10/25/16 14:18	
Tetrachloroethene	mg/L	<0.00050	0.0010	10/25/16 14:18	
Trichloroethene	mg/L	<0.00033	0.0010	10/25/16 14:18	
Vinyl chloride	mg/L	<0.00018	0.0010	10/25/16 14:18	
4-Bromofluorobenzene (S)	%	95	70-130	10/25/16 14:18	
Dibromofluoromethane (S)	%	106	70-130	10/25/16 14:18	
Toluene-d8 (S)	%	97	70-130	10/25/16 14:18	

METHOD BLANK: 1416613 Matrix: Solid
Associated Lab Samples: 1277470015, 1277470016, 1277470017, 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	<0.0041	0.010	10/25/16 20:04	
1,2-Dichloroethane	mg/L	<0.0017	0.010	10/25/16 20:04	
2-Butanone (MEK)	mg/L	<0.030	0.20	10/25/16 20:04	
Benzene	mg/L	<0.0050	0.010	10/25/16 20:04	
Carbon tetrachloride	mg/L	<0.0050	0.010	10/25/16 20:04	
Chlorobenzene	mg/L	<0.0050	0.010	10/25/16 20:04	
Chloroform	mg/L	<0.025	0.050	10/25/16 20:04	
Tetrachloroethene	mg/L	<0.0050	0.010	10/25/16 20:04	
Trichloroethene	mg/L	<0.0033	0.010	10/25/16 20:04	
Vinyl chloride	mg/L	<0.0018	0.010	10/25/16 20:04	
4-Bromofluorobenzene (S)	%	95	70-130	10/25/16 20:04	
Dibromofluoromethane (S)	%	107	70-130	10/25/16 20:04	
Toluene-d8 (S)	%	96	70-130	10/25/16 20:04	

LABORATORY CONTROL SAMPLE: 1417095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	.05	0.048	97	70-130	
1,2-Dichloroethane	mg/L	.05	0.047	93	70-130	
Benzene	mg/L	.05	0.049	97	60-135	

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

LABORATORY CONTROL SAMPLE: 1417095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	mg/L	.05	0.053	106	70-138	
Chlorobenzene	mg/L	.05	0.052	104	70-130	
Chloroform	mg/L	.05	0.047	95	70-130	
Tetrachloroethene	mg/L	.05	0.046	92	70-138	
Trichloroethene	mg/L	.05	0.051	103	70-130	
Vinyl chloride	mg/L	.05	0.047	93	49-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			98	70-130	
Toluene-d8 (S)	%			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1417096 1417097

Parameter	Units	40140468004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	mg/L	<4.1 ug/L	.5	.5	0.55	0.52	110	104	68-136	6	20	
1,2-Dichloroethane	mg/L	<1.7 ug/L	.5	.5	0.48	0.47	97	94	70-130	3	20	
2-Butanone (MEK)	mg/L	<29.8 ug/L			<0.030	<0.030					20	
Benzene	mg/L	<5.0 ug/L	.5	.5	0.50	0.50	101	100	57-138	1	20	
Carbon tetrachloride	mg/L	<5.0 ug/L	.5	.5	0.55	0.54	111	109	70-138	2	20	
Chlorobenzene	mg/L	<5.0 ug/L	.5	.5	0.52	0.51	104	103	70-130	1	20	
Chloroform	mg/L	<25.0 ug/L	.5	.5	0.51	0.50	101	99	70-130	2	20	
Tetrachloroethene	mg/L	<5.0 ug/L	.5	.5	0.46	0.47	93	94	70-148	1	20	
Trichloroethene	mg/L	<3.3 ug/L	.5	.5	0.51	0.51	102	101	70-131	1	20	
Vinyl chloride	mg/L	<1.8 ug/L	.5	.5	0.59	0.58	118	115	49-133	3	20	
4-Bromofluorobenzene (S)	%						100	100	70-130			
Dibromofluoromethane (S)	%						103	103	70-130			
Toluene-d8 (S)	%						96	97	70-130			

MATRIX SPIKE SAMPLE: 1417098

Parameter	Units	40140563001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	<4.1 ug/L	.5	0.57	114	68-136	
1,2-Dichloroethane	mg/L	<1.7 ug/L	.5	0.49	98	70-130	
2-Butanone (MEK)	mg/L	<29.8 ug/L		<0.030			
Benzene	mg/L	<5.0 ug/L	.5	0.51	102	57-138	
Carbon tetrachloride	mg/L	<5.0 ug/L	.5	0.55	110	70-138	
Chlorobenzene	mg/L	<5.0 ug/L	.5	0.52	105	70-130	
Chloroform	mg/L	<25.0 ug/L	.5	0.51	101	70-130	
Tetrachloroethene	mg/L	<5.0 ug/L	.5	0.47	95	70-148	
Trichloroethene	mg/L	<3.3 ug/L	.5	0.52	104	70-131	
Vinyl chloride	mg/L	<1.8 ug/L	.5	0.60	120	49-133	
4-Bromofluorobenzene (S)	%				101	70-130	
Dibromofluoromethane (S)	%				101	70-130	
Toluene-d8 (S)	%				97	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239311 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004, 1277470005

METHOD BLANK: 1417727 Matrix: Water
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004, 1277470005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	<0.00041	0.0010	10/26/16 06:58	
1,2-Dichloroethane	mg/L	<0.00017	0.0010	10/26/16 06:58	
2-Butanone (MEK)	mg/L	<0.0030	0.020	10/26/16 06:58	
Benzene	mg/L	<0.00050	0.0010	10/26/16 06:58	
Carbon tetrachloride	mg/L	<0.00050	0.0010	10/26/16 06:58	
Chlorobenzene	mg/L	<0.00050	0.0010	10/26/16 06:58	
Chloroform	mg/L	<0.0025	0.0050	10/26/16 06:58	
Tetrachloroethene	mg/L	<0.00050	0.0010	10/26/16 06:58	
Trichloroethene	mg/L	<0.00033	0.0010	10/26/16 06:58	
Vinyl chloride	mg/L	<0.00018	0.0010	10/26/16 06:58	
4-Bromofluorobenzene (S)	%	87	70-130	10/26/16 06:58	
Dibromofluoromethane (S)	%	109	70-130	10/26/16 06:58	
Toluene-d8 (S)	%	83	70-130	10/26/16 06:58	

METHOD BLANK: 1417187 Matrix: Solid
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004, 1277470005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	<0.0041	0.010	10/26/16 11:02	
1,2-Dichloroethane	mg/L	<0.0017	0.010	10/26/16 11:02	
2-Butanone (MEK)	mg/L	<0.030	0.20	10/26/16 11:02	
Benzene	mg/L	<0.0050	0.010	10/26/16 11:02	
Carbon tetrachloride	mg/L	<0.0050	0.010	10/26/16 11:02	
Chlorobenzene	mg/L	<0.0050	0.010	10/26/16 11:02	
Chloroform	mg/L	<0.025	0.050	10/26/16 11:02	
Tetrachloroethene	mg/L	<0.0050	0.010	10/26/16 11:02	
Trichloroethene	mg/L	<0.0033	0.010	10/26/16 11:02	
Vinyl chloride	mg/L	<0.0018	0.010	10/26/16 11:02	
4-Bromofluorobenzene (S)	%	88	70-130	10/26/16 11:02	
Dibromofluoromethane (S)	%	109	70-130	10/26/16 11:02	
Toluene-d8 (S)	%	82	70-130	10/26/16 11:02	

LABORATORY CONTROL SAMPLE: 1417728

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	.05	0.055	111	70-130	
1,2-Dichloroethane	mg/L	.05	0.063	127	70-130	
Benzene	mg/L	.05	0.062	124	60-135	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

LABORATORY CONTROL SAMPLE: 1417728

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	mg/L	.05	0.060	120	70-138	
Chlorobenzene	mg/L	.05	0.051	102	70-130	
Chloroform	mg/L	.05	0.060	121	70-130	
Tetrachloroethene	mg/L	.05	0.051	102	70-138	
Trichloroethene	mg/L	.05	0.056	112	70-130	
Vinyl chloride	mg/L	.05	0.062	123	49-130	
4-Bromofluorobenzene (S)	%			93	70-130	
Dibromofluoromethane (S)	%			106	70-130	
Toluene-d8 (S)	%			87	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1417920 1417921

Parameter	Units	40140740001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	mg/L	<4.1 ug/L	.5	.5	0.56	0.54	113	109	68-136	4	20	
1,2-Dichloroethane	mg/L	<1.7 ug/L	.5	.5	0.63	0.61	126	122	70-130	3	20	
Benzene	mg/L	<5.0 ug/L	.5	.5	0.61	0.60	122	119	57-138	2	20	
Carbon tetrachloride	mg/L	<5.0 ug/L	.5	.5	0.61	0.58	122	116	70-138	6	20	
Chlorobenzene	mg/L	<5.0 ug/L	.5	.5	0.49	0.48	98	96	70-130	2	20	
Chloroform	mg/L	<25.0 ug/L	.5	.5	0.61	0.60	123	119	70-130	3	20	
Tetrachloroethene	mg/L	<5.0 ug/L	.5	.5	0.51	0.50	101	99	70-148	2	20	
Trichloroethene	mg/L	<3.3 ug/L	.5	.5	0.56	0.55	112	110	70-131	2	20	
Vinyl chloride	mg/L	<1.8 ug/L	.5	.5	0.62	0.58	124	115	49-133	7	20	
4-Bromofluorobenzene (S)	%						96	91	70-130			
Dibromofluoromethane (S)	%						106	107	70-130			
Toluene-d8 (S)	%						85	86	70-130			

MATRIX SPIKE SAMPLE: 1417961

Parameter	Units	40140663004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	<4.1 ug/L	.5	0.61	122	68-136	
1,2-Dichloroethane	mg/L	<1.7 ug/L	.5	0.63	126	70-130	
Benzene	mg/L	<5.0 ug/L	.5	0.59	118	57-138	
Carbon tetrachloride	mg/L	<5.0 ug/L	.5	0.60	120	70-138	
Chlorobenzene	mg/L	<5.0 ug/L	.5	0.50	99	70-130	
Chloroform	mg/L	<25.0 ug/L	.5	0.61	122	70-130	
Tetrachloroethene	mg/L	<5.0 ug/L	.5	0.45	89	70-148	
Trichloroethene	mg/L	<3.3 ug/L	.5	0.59	119	70-131	
Vinyl chloride	mg/L	<1.8 ug/L	.5	0.65	130	49-133	
4-Bromofluorobenzene (S)	%				96	70-130	
Dibromofluoromethane (S)	%				106	70-130	
Toluene-d8 (S)	%				83	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

MATRIX SPIKE SAMPLE: 1417962

Parameter	Units	40140592001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	<0.0041	.5	0.56	112	68-136	
1,2-Dichloroethane	mg/L	<0.0017	.5	0.64	129	70-130	
Benzene	mg/L	<0.0050	.5	0.61	123	57-138	
Carbon tetrachloride	mg/L	<0.0050	.5	0.59	118	70-138	
Chlorobenzene	mg/L	<0.0050	.5	0.49	98	70-130	
Chloroform	mg/L	<0.025	.5	0.61	123	70-130	
Tetrachloroethene	mg/L	<0.0050	.5	0.49	97	70-148	
Trichloroethene	mg/L	<0.0033	.5	0.56	112	70-131	
Vinyl chloride	mg/L	<0.0018	.5	0.59	119	49-133	
4-Bromofluorobenzene (S)	%				98	70-130	
Dibromofluoromethane (S)	%				106	70-130	
Toluene-d8 (S)	%				84	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239479 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014

METHOD BLANK: 1418699 Matrix: Water
Associated Lab Samples: 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	<0.00041	0.0010	10/28/16 12:18	
1,2-Dichloroethane	mg/L	<0.00017	0.0010	10/28/16 12:18	
2-Butanone (MEK)	mg/L	<0.0030	0.020	10/28/16 12:18	
Benzene	mg/L	<0.00050	0.0010	10/28/16 12:18	
Carbon tetrachloride	mg/L	<0.00050	0.0010	10/28/16 12:18	
Chlorobenzene	mg/L	<0.00050	0.0010	10/28/16 12:18	
Chloroform	mg/L	<0.0025	0.0050	10/28/16 12:18	
Tetrachloroethene	mg/L	<0.00050	0.0010	10/28/16 12:18	
Trichloroethene	mg/L	<0.00033	0.0010	10/28/16 12:18	
Vinyl chloride	mg/L	<0.00018	0.0010	10/28/16 12:18	
4-Bromofluorobenzene (S)	%	78	70-130	10/28/16 12:18	
Dibromofluoromethane (S)	%	95	70-130	10/28/16 12:18	
Toluene-d8 (S)	%	89	70-130	10/28/16 12:18	

METHOD BLANK: 1418222 Matrix: Solid
Associated Lab Samples: 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	<0.0041	0.010	10/28/16 17:55	
1,2-Dichloroethane	mg/L	<0.0017	0.010	10/28/16 17:55	
2-Butanone (MEK)	mg/L	<0.030	0.20	10/28/16 17:55	
Benzene	mg/L	<0.0050	0.010	10/28/16 17:55	
Carbon tetrachloride	mg/L	<0.0050	0.010	10/28/16 17:55	
Chlorobenzene	mg/L	<0.0050	0.010	10/28/16 17:55	
Chloroform	mg/L	<0.025	0.050	10/28/16 17:55	
Tetrachloroethene	mg/L	<0.0050	0.010	10/28/16 17:55	
Trichloroethene	mg/L	<0.0033	0.010	10/28/16 17:55	
Vinyl chloride	mg/L	<0.0018	0.010	10/28/16 17:55	
4-Bromofluorobenzene (S)	%	82	70-130	10/28/16 17:55	
Dibromofluoromethane (S)	%	100	70-130	10/28/16 17:55	
Toluene-d8 (S)	%	94	70-130	10/28/16 17:55	

LABORATORY CONTROL SAMPLE: 1418700

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	.02	0.017	83	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

LABORATORY CONTROL SAMPLE: 1418700

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	mg/L	.02	0.020	100	70-130	
Benzene	mg/L	.02	0.018	90	60-135	
Carbon tetrachloride	mg/L	.02	0.017	85	70-138	
Chlorobenzene	mg/L	.02	0.021	103	70-130	
Chloroform	mg/L	.02	0.019	95	70-130	
Tetrachloroethene	mg/L	.02	0.017	84	70-138	
Trichloroethene	mg/L	.02	0.019	96	70-130	
Vinyl chloride	mg/L	.02	0.021	105	49-130	
4-Bromofluorobenzene (S)	%			91	70-130	
Dibromofluoromethane (S)	%			94	70-130	
Toluene-d8 (S)	%			92	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1420354 1420355

Parameter	Units	1277470006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	mg/L	<0.0041	.5	.5	0.45	0.45	91	89	68-136	2	20	
1,2-Dichloroethane	mg/L	<0.0017	.5	.5	0.48	0.49	97	97	70-130	0	20	
Benzene	mg/L	<0.0050	.5	.5	0.46	0.48	93	96	57-138	4	20	
Carbon tetrachloride	mg/L	<0.0050	.5	.5	0.46	0.47	92	93	70-138	1	20	
Chlorobenzene	mg/L	<0.0050	.5	.5	0.52	0.52	103	104	70-130	0	20	
Chloroform	mg/L	<0.025	.5	.5	0.47	0.48	94	95	70-130	1	20	
Tetrachloroethene	mg/L	<0.0050	.5	.5	0.45	0.51	90	102	70-148	13	20	
Trichloroethene	mg/L	<0.0033	.5	.5	0.59	0.51	118	102	70-131	15	20	
Vinyl chloride	mg/L	<0.0018	.5	.5	0.55	0.51	111	103	49-133	8	20	
4-Bromofluorobenzene (S)	%						95	91	70-130			
Dibromofluoromethane (S)	%						91	93	70-130			
Toluene-d8 (S)	%						91	98	70-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239616
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Associated Lab Samples: 1277470001

METHOD BLANK: 1419482 Matrix: Solid
Associated Lab Samples: 1277470001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	mg/kg	<0.0039	0.013	10/28/16 11:18	
Acenaphthylene	mg/kg	<0.0033	0.011	10/28/16 11:18	
Anthracene	mg/kg	<0.0057	0.019	10/28/16 11:18	
Benzo(a)anthracene	mg/kg	<0.0032	0.011	10/28/16 11:18	
Benzo(a)pyrene	mg/kg	<0.0025	0.0084	10/28/16 11:18	
Benzo(b)fluoranthene	mg/kg	<0.0028	0.0094	10/28/16 11:18	
Benzo(g,h,i)perylene	mg/kg	<0.0020	0.0068	10/28/16 11:18	
Benzo(k)fluoranthene	mg/kg	<0.0025	0.0084	10/28/16 11:18	
Chrysene	mg/kg	<0.0034	0.011	10/28/16 11:18	
Dibenz(a,h)anthracene	mg/kg	<0.0022	0.0074	10/28/16 11:18	
Fluoranthene	mg/kg	<0.0052	0.017	10/28/16 11:18	
Fluorene	mg/kg	<0.0041	0.014	10/28/16 11:18	
Indeno(1,2,3-cd)pyrene	mg/kg	<0.0022	0.0073	10/28/16 11:18	
Naphthalene	mg/kg	<0.0084	0.028	10/28/16 11:18	
Phenanthrene	mg/kg	<0.012	0.039	10/28/16 11:18	
Pyrene	mg/kg	<0.0045	0.015	10/28/16 11:18	
2-Fluorobiphenyl (S)	%	74	26-130	10/28/16 11:18	
Terphenyl-d14 (S)	%	83	10-130	10/28/16 11:18	

LABORATORY CONTROL SAMPLE: 1419483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	mg/kg	.33	0.25	75	54-130	
Acenaphthylene	mg/kg	.33	0.25	75	56-130	
Anthracene	mg/kg	.33	0.31	94	70-130	
Benzo(a)anthracene	mg/kg	.33	0.25	76	58-130	
Benzo(a)pyrene	mg/kg	.33	0.32	97	58-130	
Benzo(b)fluoranthene	mg/kg	.33	0.28	85	50-130	
Benzo(g,h,i)perylene	mg/kg	.33	0.30	89	39-130	
Benzo(k)fluoranthene	mg/kg	.33	0.36	107	57-130	
Chrysene	mg/kg	.33	0.34	102	64-130	
Dibenz(a,h)anthracene	mg/kg	.33	0.30	89	44-130	
Fluoranthene	mg/kg	.33	0.29	87	59-130	
Fluorene	mg/kg	.33	0.25	75	56-130	
Indeno(1,2,3-cd)pyrene	mg/kg	.33	0.31	92	45-130	
Naphthalene	mg/kg	.33	0.26	77	46-130	
Phenanthrene	mg/kg	.33	0.28	85	56-130	
Pyrene	mg/kg	.33	0.29	87	59-130	
2-Fluorobiphenyl (S)	%			76	26-130	
Terphenyl-d14 (S)	%			85	10-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1419484 1419485

Parameter	Units	40140913003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	mg/kg	<15.0 ug/kg	.385	.385	0.23	0.27	60	69	49-130	14	27	
Acenaphthylene	mg/kg	<12.8 ug/kg	.385	.385	0.23	0.27	60	69	52-130	14	26	
Anthracene	mg/kg	<22.1 ug/kg	.385	.385	0.27	0.32	69	82	61-130	17	29	
Benzo(a)anthracene	mg/kg	<12.4 ug/kg	.385	.385	0.24	0.28	61	71	45-130	16	28	
Benzo(a)pyrene	mg/kg	<9.8 ug/kg	.385	.385	0.27	0.30	69	78	39-130	12	34	
Benzo(b)fluoranthene	mg/kg	<11.0 ug/kg	.385	.385	0.25	0.29	64	75	30-130	17	43	
Benzo(g,h,i)perylene	mg/kg	<7.9 ug/kg	.385	.385	0.25	0.30	65	76	24-130	16	34	
Benzo(k)fluoranthene	mg/kg	<9.7 ug/kg	.385	.385	0.31	0.36	79	92	41-130	15	32	
Chrysene	mg/kg	<13.1 ug/kg	.385	.385	0.28	0.34	71	87	46-130	20	37	
Dibenz(a,h)anthracene	mg/kg	<8.7 ug/kg	.385	.385	0.26	0.31	67	79	33-130	16	34	
Fluoranthene	mg/kg	<20.3 ug/kg	.385	.385	0.26	0.31	67	80	41-130	17	25	
Fluorene	mg/kg	<16.1 ug/kg	.385	.385	0.23	0.27	60	71	49-130	16	30	
Indeno(1,2,3-cd)pyrene	mg/kg	<8.5 ug/kg	.385	.385	0.27	0.31	70	81	30-130	15	28	
Naphthalene	mg/kg	<32.8 ug/kg	.385	.385	0.26	0.28	67	72	39-130	8	26	
Phenanthrene	mg/kg	<45.2 ug/kg	.385	.385	0.26	0.31	66	79	47-130	17	26	
Pyrene	mg/kg	<17.5 ug/kg	.385	.385	0.26	0.31	67	78	37-130	16	30	
2-Fluorobiphenyl (S)	%						58	66	26-130			
Terphenyl-d14 (S)	%						62	71	10-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239617 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270/3546 MSSV PAH by SIM
Associated Lab Samples: 1277470002, 1277470003, 1277470004, 1277470005, 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014, 1277470015, 1277470016, 1277470017, 1277470018, 1277470019, 1277470020

METHOD BLANK: 1419486 Matrix: Solid
Associated Lab Samples: 1277470002, 1277470003, 1277470004, 1277470005, 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014, 1277470015, 1277470016, 1277470017, 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	mg/kg	<0.0039	0.013	10/28/16 17:39	
Acenaphthylene	mg/kg	<0.0033	0.011	10/28/16 17:39	
Anthracene	mg/kg	<0.0057	0.019	10/28/16 17:39	
Benzo(a)anthracene	mg/kg	<0.0032	0.011	10/28/16 17:39	
Benzo(a)pyrene	mg/kg	<0.0025	0.0084	10/28/16 17:39	
Benzo(b)fluoranthene	mg/kg	<0.0028	0.0094	10/28/16 17:39	
Benzo(g,h,i)perylene	mg/kg	<0.0020	0.0068	10/28/16 17:39	
Benzo(k)fluoranthene	mg/kg	<0.0025	0.0084	10/28/16 17:39	
Chrysene	mg/kg	<0.0034	0.011	10/28/16 17:39	
Dibenz(a,h)anthracene	mg/kg	<0.0022	0.0074	10/28/16 17:39	
Fluoranthene	mg/kg	<0.0052	0.017	10/28/16 17:39	
Fluorene	mg/kg	<0.0041	0.014	10/28/16 17:39	
Indeno(1,2,3-cd)pyrene	mg/kg	<0.0022	0.0073	10/28/16 17:39	
Naphthalene	mg/kg	<0.0084	0.028	10/28/16 17:39	
Phenanthrene	mg/kg	<0.012	0.039	10/28/16 17:39	
Pyrene	mg/kg	<0.0045	0.015	10/28/16 17:39	
2-Fluorobiphenyl (S)	%	68	26-130	10/28/16 17:39	
Terphenyl-d14 (S)	%	89	10-130	10/28/16 17:39	

LABORATORY CONTROL SAMPLE: 1419487

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	mg/kg	.33	0.26	78	54-130	
Acenaphthylene	mg/kg	.33	0.26	77	56-130	
Anthracene	mg/kg	.33	0.32	95	70-130	
Benzo(a)anthracene	mg/kg	.33	0.26	77	58-130	
Benzo(a)pyrene	mg/kg	.33	0.29	88	58-130	
Benzo(b)fluoranthene	mg/kg	.33	0.26	79	50-130	
Benzo(g,h,i)perylene	mg/kg	.33	0.24	73	39-130	
Benzo(k)fluoranthene	mg/kg	.33	0.33	98	57-130	
Chrysene	mg/kg	.33	0.33	100	64-130	
Dibenz(a,h)anthracene	mg/kg	.33	0.26	79	44-130	
Fluoranthene	mg/kg	.33	0.29	87	59-130	
Fluorene	mg/kg	.33	0.26	77	56-130	
Indeno(1,2,3-cd)pyrene	mg/kg	.33	0.27	81	45-130	
Naphthalene	mg/kg	.33	0.27	80	46-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

LABORATORY CONTROL SAMPLE: 1419487

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	mg/kg	.33	0.29	86	56-130	
Pyrene	mg/kg	.33	0.30	89	59-130	
2-Fluorobiphenyl (S)	%			79	26-130	
Terphenyl-d14 (S)	%			86	10-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1419488 1419489

Parameter	Units	1277470014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	mg/kg	<0.0041	.351	.351	0.22	0.24	62	66	49-130	7	27	
Acenaphthylene	mg/kg	<0.0035	.351	.351	0.22	0.23	61	65	52-130	7	26	
Anthracene	mg/kg	0.0077J	.351	.351	0.27	0.29	74	80	61-130	8	29	
Benzo(a)anthracene	mg/kg	0.024	.351	.351	0.25	0.29	65	75	45-130	13	28	
Benzo(a)pyrene	mg/kg	0.026	.351	.351	0.29	0.32	73	83	39-130	11	34	
Benzo(b)fluoranthene	mg/kg	0.040	.351	.351	0.36	0.41	91	104	30-130	12	43	
Benzo(g,h,i)perylene	mg/kg	0.0076	.351	.351	0.11	0.12	29	32	24-130	10	34	
Benzo(k)fluoranthene	mg/kg	0.017	.351	.351	0.36	0.39	97	106	41-130	9	32	
Chrysene	mg/kg	0.028	.351	.351	0.29	0.33	73	85	46-130	14	37	
Dibenz(a,h)anthracene	mg/kg	<0.0024	.351	.351	0.13	0.14	37	40	33-130	9	34	
Fluoranthene	mg/kg	0.046	.351	.351	0.28	0.33	66	80	41-130	16	25	
Fluorene	mg/kg	<0.0044	.351	.351	0.22	0.24	62	67	49-130	7	30	
Indeno(1,2,3-cd)pyrene	mg/kg	0.0073J	.351	.351	0.13	0.15	36	40	30-130	11	28	
Naphthalene	mg/kg	0.016J	.351	.351	0.23	0.26	62	70	39-130	12	26	
Phenanthrene	mg/kg	0.032J	.351	.351	0.28	0.32	71	81	47-130	13	26	
Pyrene	mg/kg	0.054	.351	.351	0.34	0.39	80	96	37-130	15	30	
2-Fluorobiphenyl (S)	%						63	68	26-130			
Terphenyl-d14 (S)	%						83	88	10-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239159 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 1277470018, 1277470019, 1277470020

METHOD BLANK: 1417014 Matrix: Water
Associated Lab Samples: 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<3.9	10.0	10/26/16 08:41	
2,4,5-Trichlorophenol	ug/L	<1.5	10.0	10/26/16 08:41	
2,4,6-Trichlorophenol	ug/L	<2.1	10.0	10/26/16 08:41	
2,4-Dinitrotoluene	ug/L	<2.0	10.0	10/26/16 08:41	
2-Methylphenol(o-Cresol)	ug/L	<1.9	10.0	10/26/16 08:41	
3&4-Methylphenol(m&p Cresol)	ug/L	<2.6	10.0	10/26/16 08:41	
Hexachloro-1,3-butadiene	ug/L	<3.6	20.0	10/26/16 08:41	
Hexachlorobenzene	ug/L	<1.1	10.0	10/26/16 08:41	
Hexachloroethane	ug/L	<3.0	10.0	10/26/16 08:41	
Nitrobenzene	ug/L	<2.1	10.0	10/26/16 08:41	
Pentachlorophenol	ug/L	<1.5	20.0	10/26/16 08:41	
Pyridine	ug/L	<2.9	10.0	10/26/16 08:41	
2,4,6-Tribromophenol (S)	%	92	42-140	10/26/16 08:41	
2-Fluorobiphenyl (S)	%	82	41-130	10/26/16 08:41	
Nitrobenzene-d5 (S)	%	90	43-130	10/26/16 08:41	
Phenol-d6 (S)	%	40	15-130	10/26/16 08:41	

METHOD BLANK: 1414442 Matrix: Water
Associated Lab Samples: 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	50.0	10/26/16 16:29	
2,4,5-Trichlorophenol	ug/L	<7.6	50.0	10/26/16 16:29	
2,4,6-Trichlorophenol	ug/L	<10.5	50.0	10/26/16 16:29	
2,4-Dinitrotoluene	ug/L	<10	50.0	10/26/16 16:29	
2-Methylphenol(o-Cresol)	ug/L	<9.6	50.0	10/26/16 16:29	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	50.0	10/26/16 16:29	
Hexachloro-1,3-butadiene	ug/L	<18.2	100	10/26/16 16:29	
Hexachlorobenzene	ug/L	<5.7	50.0	10/26/16 16:29	
Hexachloroethane	ug/L	<14.8	50.0	10/26/16 16:29	
Nitrobenzene	ug/L	<10.3	50.0	10/26/16 16:29	
Pentachlorophenol	ug/L	<7.5	100	10/26/16 16:29	
Pyridine	ug/L	<14.6	50.0	10/26/16 16:29	
2,4,6-Tribromophenol (S)	%	84	42-140	10/26/16 16:29	
2-Fluorobiphenyl (S)	%	84	41-130	10/26/16 16:29	
Nitrobenzene-d5 (S)	%	93	43-130	10/26/16 16:29	
Phenol-d6 (S)	%	37	15-130	10/26/16 16:29	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

METHOD BLANK: 1416312 Matrix: Water
Associated Lab Samples: 1277470018, 1277470019, 1277470020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	50.0	10/26/16 16:50	
2,4,5-Trichlorophenol	ug/L	<7.6	50.0	10/26/16 16:50	
2,4,6-Trichlorophenol	ug/L	<10.5	50.0	10/26/16 16:50	
2,4-Dinitrotoluene	ug/L	<10	50.0	10/26/16 16:50	
2-Methylphenol(o-Cresol)	ug/L	<9.6	50.0	10/26/16 16:50	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	50.0	10/26/16 16:50	
Hexachloro-1,3-butadiene	ug/L	<18.2	100	10/26/16 16:50	
Hexachlorobenzene	ug/L	<5.7	50.0	10/26/16 16:50	
Hexachloroethane	ug/L	<14.8	50.0	10/26/16 16:50	
Nitrobenzene	ug/L	<10.3	50.0	10/26/16 16:50	
Pentachlorophenol	ug/L	<7.5	100	10/26/16 16:50	
Pyridine	ug/L	<14.6	50.0	10/26/16 16:50	
2,4,6-Tribromophenol (S)	%	81	42-140	10/26/16 16:50	
2-Fluorobiphenyl (S)	%	70	41-130	10/26/16 16:50	
Nitrobenzene-d5 (S)	%	82	43-130	10/26/16 16:50	
Phenol-d6 (S)	%	33	15-130	10/26/16 16:50	

LABORATORY CONTROL SAMPLE: 1417015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	31.9	64	42-130	
2,4,5-Trichlorophenol	ug/L	50	50.4	101	70-130	
2,4,6-Trichlorophenol	ug/L	50	51.1	102	70-130	
2,4-Dinitrotoluene	ug/L	50	52.5	105	70-130	
2-Methylphenol(o-Cresol)	ug/L	50	38.8	78	57-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	34.9	70	47-130	
Hexachloro-1,3-butadiene	ug/L	50	37.9	76	46-130	
Hexachlorobenzene	ug/L	50	49.6	99	70-130	
Hexachloroethane	ug/L	50	30.3	61	37-130	
Nitrobenzene	ug/L	50	43.4	87	62-130	
Pentachlorophenol	ug/L	50	45.9	92	50-130	
Pyridine	ug/L	50	12.6	25	10-130	
2,4,6-Tribromophenol (S)	%			107	42-140	
2-Fluorobiphenyl (S)	%			102	41-130	
Nitrobenzene-d5 (S)	%			98	43-130	
Phenol-d6 (S)	%			41	15-130	

MATRIX SPIKE SAMPLE: 1417016

Parameter	Units	40140265004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	250	162	65	26-130	
2,4,5-Trichlorophenol	ug/L	<7.6	250	243	97	55-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1730 Oneota Street
Duluth, MN 55807
(218) 727-6380

QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

MATRIX SPIKE SAMPLE: 1417016

Parameter	Units	40140265004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,4,6-Trichlorophenol	ug/L	<10.5	250	242	97	56-130	
2,4-Dinitrotoluene	ug/L	<10	250	256	103	69-130	
2-Methylphenol(o-Cresol)	ug/L	<9.6	250	179	72	40-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	250	161	64	35-130	
Hexachloro-1,3-butadiene	ug/L	<18.2	250	200	80	45-130	
Hexachlorobenzene	ug/L	<5.7	250	246	98	70-130	
Hexachloroethane	ug/L	<14.8	250	155	62	34-130	
Nitrobenzene	ug/L	<10.3	250	223	89	62-130	
Pentachlorophenol	ug/L	<7.5	250	229	91	28-138	
Pyridine	ug/L	<14.6	250	83.7	33	10-130	
2,4,6-Tribromophenol (S)	%				111	42-140	
2-Fluorobiphenyl (S)	%				97	41-130	
Nitrobenzene-d5 (S)	%				96	43-130	
Phenol-d6 (S)	%				40	15-130	

MATRIX SPIKE SAMPLE: 1417017

Parameter	Units	40140490001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	250	136	54	26-130	
2,4,5-Trichlorophenol	ug/L	<7.6	250	203	81	55-130	
2,4,6-Trichlorophenol	ug/L	<10.5	250	212	85	56-130	
2,4-Dinitrotoluene	ug/L	<10	250	218	87	69-130	
2-Methylphenol(o-Cresol)	ug/L	<9.6	250	160	64	40-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	250	142	57	35-130	
Hexachloro-1,3-butadiene	ug/L	<18.2	250	157	63	45-130	
Hexachlorobenzene	ug/L	<5.7	250	208	83	70-130	
Hexachloroethane	ug/L	<14.8	250	129	51	34-130	
Nitrobenzene	ug/L	<10.3	250	191	76	62-130	
Pentachlorophenol	ug/L	<7.5	250	164	66	28-138	
Pyridine	ug/L	<14.6	250	70.5	28	10-130	
2,4,6-Tribromophenol (S)	%				95	42-140	
2-Fluorobiphenyl (S)	%				85	41-130	
Nitrobenzene-d5 (S)	%				84	43-130	
Phenol-d6 (S)	%				34	15-130	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239603 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004, 1277470005

METHOD BLANK: 1419412 Matrix: Water
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004, 1277470005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<3.9	10.0	10/31/16 10:26	
2,4,5-Trichlorophenol	ug/L	<1.5	10.0	10/31/16 10:26	
2,4,6-Trichlorophenol	ug/L	<2.1	10.0	10/31/16 10:26	
2,4-Dinitrotoluene	ug/L	<2.0	10.0	10/31/16 10:26	
2-Methylphenol(o-Cresol)	ug/L	<1.9	10.0	10/31/16 10:26	
3&4-Methylphenol(m&p Cresol)	ug/L	<2.6	10.0	10/31/16 10:26	
Hexachloro-1,3-butadiene	ug/L	<3.6	20.0	10/31/16 10:26	
Hexachlorobenzene	ug/L	<1.1	10.0	10/31/16 10:26	
Hexachloroethane	ug/L	<3.0	10.0	10/31/16 10:26	
Nitrobenzene	ug/L	<2.1	10.0	10/31/16 10:26	
Pentachlorophenol	ug/L	<1.5	20.0	10/31/16 10:26	
Pyridine	ug/L	<2.9	10.0	10/31/16 10:26	
2,4,6-Tribromophenol (S)	%	93	42-140	10/31/16 10:26	
2-Fluorobiphenyl (S)	%	72	41-130	10/31/16 10:26	
Nitrobenzene-d5 (S)	%	85	43-130	10/31/16 10:26	
Phenol-d6 (S)	%	36	15-130	10/31/16 10:26	

METHOD BLANK: 1417185 Matrix: Water
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004, 1277470005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	50.0	10/31/16 11:09	
2,4,5-Trichlorophenol	ug/L	<7.6	50.0	10/31/16 11:09	
2,4,6-Trichlorophenol	ug/L	<10.5	50.0	10/31/16 11:09	
2,4-Dinitrotoluene	ug/L	<10	50.0	10/31/16 11:09	
2-Methylphenol(o-Cresol)	ug/L	<9.6	50.0	10/31/16 11:09	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	50.0	10/31/16 11:09	
Hexachloro-1,3-butadiene	ug/L	<18.2	100	10/31/16 11:09	
Hexachlorobenzene	ug/L	<5.7	50.0	10/31/16 11:09	
Hexachloroethane	ug/L	<14.8	50.0	10/31/16 11:09	
Nitrobenzene	ug/L	<10.3	50.0	10/31/16 11:09	
Pentachlorophenol	ug/L	<7.5	100	10/31/16 11:09	
Pyridine	ug/L	<14.6	50.0	10/31/16 11:09	
2,4,6-Tribromophenol (S)	%	95	42-140	10/31/16 11:09	
2-Fluorobiphenyl (S)	%	77	41-130	10/31/16 11:09	
Nitrobenzene-d5 (S)	%	86	43-130	10/31/16 11:09	
Phenol-d6 (S)	%	35	15-130	10/31/16 11:09	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

LABORATORY CONTROL SAMPLE: 1419413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	31.6	63	42-130	
2,4,5-Trichlorophenol	ug/L	50	44.3	89	70-130	
2,4,6-Trichlorophenol	ug/L	50	46.9	94	70-130	
2,4-Dinitrotoluene	ug/L	50	49.2	98	70-130	
2-Methylphenol(o-Cresol)	ug/L	50	35.5	71	57-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	32.3	65	47-130	
Hexachloro-1,3-butadiene	ug/L	50	35.7	71	46-130	
Hexachlorobenzene	ug/L	50	46.8	94	70-130	
Hexachloroethane	ug/L	50	28.3	57	37-130	
Nitrobenzene	ug/L	50	43.9	88	62-130	
Pentachlorophenol	ug/L	50	47.5	95	50-130	
Pyridine	ug/L	50	10.9	22	10-130	
2,4,6-Tribromophenol (S)	%			92	42-140	
2-Fluorobiphenyl (S)	%			88	41-130	
Nitrobenzene-d5 (S)	%			88	43-130	
Phenol-d6 (S)	%			37	15-130	

MATRIX SPIKE SAMPLE: 1419414

Parameter	Units	40140663004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	250	150	60	26-130	
2,4,5-Trichlorophenol	ug/L	<7.6	250	230	92	55-130	
2,4,6-Trichlorophenol	ug/L	<10.5	250	234	94	56-130	
2,4-Dinitrotoluene	ug/L	<10	250	239	96	69-130	
2-Methylphenol(o-Cresol)	ug/L	<9.6	250	185	74	40-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	250	169	67	35-130	
Hexachloro-1,3-butadiene	ug/L	<18.2	250	176	70	45-130	
Hexachlorobenzene	ug/L	<5.7	250	232	93	70-130	
Hexachloroethane	ug/L	<14.8	250	140	56	34-130	
Nitrobenzene	ug/L	<10.3	250	218	87	62-130	
Pentachlorophenol	ug/L	<7.5	250	240	96	28-138	
Pyridine	ug/L	<14.6	250	62.4	25	10-130	
2,4,6-Tribromophenol (S)	%				96	42-140	
2-Fluorobiphenyl (S)	%				84	41-130	
Nitrobenzene-d5 (S)	%				88	43-130	
Phenol-d6 (S)	%				36	15-130	

MATRIX SPIKE SAMPLE: 1419415

Parameter	Units	1277470005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	250	150	60	26-130	
2,4,5-Trichlorophenol	ug/L	<7.6	250	221	88	55-130	
2,4,6-Trichlorophenol	ug/L	<10.5	250	229	91	56-130	
2,4-Dinitrotoluene	ug/L	<10	250	236	94	69-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

MATRIX SPIKE SAMPLE: 1419415

Parameter	Units	1277470005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2-Methylphenol(o-Cresol)	ug/L	<9.6	250	173	69	40-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	250	159	64	35-130	
Hexachloro-1,3-butadiene	ug/L	<18.2	250	172	69	45-130	
Hexachlorobenzene	ug/L	<5.7	250	228	91	70-130	
Hexachloroethane	ug/L	<14.8	250	135	54	34-130	
Nitrobenzene	ug/L	<10.3	250	213	85	62-130	
Pentachlorophenol	ug/L	<7.5	250	239	96	28-138	
Pyridine	ug/L	<14.6	250	136	54	10-130	
2,4,6-Tribromophenol (S)	%				92	42-140	
2-Fluorobiphenyl (S)	%				84	41-130	
Nitrobenzene-d5 (S)	%				84	43-130	
Phenol-d6 (S)	%				34	15-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239868 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014, 1277470015, 1277470016, 1277470017

METHOD BLANK: 1420854 Matrix: Water
Associated Lab Samples: 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014, 1277470015, 1277470016, 1277470017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<3.9	10.0	11/02/16 08:55	
2,4,5-Trichlorophenol	ug/L	<1.5	10.0	11/02/16 08:55	
2,4,6-Trichlorophenol	ug/L	<2.1	10.0	11/02/16 08:55	
2,4-Dinitrotoluene	ug/L	<2.0	10.0	11/02/16 08:55	
2-Methylphenol(o-Cresol)	ug/L	<1.9	10.0	11/02/16 08:55	
3&4-Methylphenol(m&p Cresol)	ug/L	<2.6	10.0	11/02/16 08:55	
Hexachloro-1,3-butadiene	ug/L	<3.6	20.0	11/02/16 08:55	
Hexachlorobenzene	ug/L	<1.1	10.0	11/02/16 08:55	
Hexachloroethane	ug/L	<3.0	10.0	11/02/16 08:55	
Nitrobenzene	ug/L	<2.1	10.0	11/02/16 08:55	
Pentachlorophenol	ug/L	<1.5	20.0	11/02/16 08:55	
Pyridine	ug/L	<2.9	10.0	11/02/16 08:55	
2,4,6-Tribromophenol (S)	%	74	42-140	11/02/16 08:55	
2-Fluorobiphenyl (S)	%	67	41-130	11/02/16 08:55	
Nitrobenzene-d5 (S)	%	77	43-130	11/02/16 08:55	
Phenol-d6 (S)	%	28	15-130	11/02/16 08:55	

LABORATORY CONTROL SAMPLE: 1420855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	32.6	65	42-130	
2,4,5-Trichlorophenol	ug/L	50	48.9	98	70-130	
2,4,6-Trichlorophenol	ug/L	50	46.5	93	70-130	
2,4-Dinitrotoluene	ug/L	50	49.9	100	70-130	
2-Methylphenol(o-Cresol)	ug/L	50	36.6	73	57-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	34.1	68	47-130	
Hexachloro-1,3-butadiene	ug/L	50	40.2	80	46-130	
Hexachlorobenzene	ug/L	50	48.5	97	70-130	
Hexachloroethane	ug/L	50	29.9	60	37-130	
Nitrobenzene	ug/L	50	47.5	95	62-130	
Pentachlorophenol	ug/L	50	51.6	103	50-130	
Pyridine	ug/L	50	21.1	42	10-130	
2,4,6-Tribromophenol (S)	%			82	42-140	
2-Fluorobiphenyl (S)	%			77	41-130	
Nitrobenzene-d5 (S)	%			80	43-130	
Phenol-d6 (S)	%			32	15-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

MATRIX SPIKE SAMPLE: 1420856

Parameter	Units	1277470006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	250	133	53	26-130	
2,4,5-Trichlorophenol	ug/L	<7.6	250	201	80	55-130	
2,4,6-Trichlorophenol	ug/L	<10.5	250	221	88	56-130	
2,4-Dinitrotoluene	ug/L	<10	250	219	88	69-130	
2-Methylphenol(o-Cresol)	ug/L	<9.6	250	167	67	40-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	250	148	59	35-130	
Hexachloro-1,3-butadiene	ug/L	<18.2	250	169	68	45-130	
Hexachlorobenzene	ug/L	<5.7	250	215	86	70-130	
Hexachloroethane	ug/L	<14.8	250	116	47	34-130	
Nitrobenzene	ug/L	<10.3	250	207	83	62-130	
Pentachlorophenol	ug/L	<7.5	250	223	89	28-138	
Pyridine	ug/L	<14.6	250	116	46	10-130	
2,4,6-Tribromophenol (S)	%				71	42-140	
2-Fluorobiphenyl (S)	%				64	41-130	
Nitrobenzene-d5 (S)	%				66	43-130	
Phenol-d6 (S)	%				27	15-130	

MATRIX SPIKE SAMPLE: 1420857

Parameter	Units	1277470014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<19.4	250	151	60	26-130	
2,4,5-Trichlorophenol	ug/L	<7.6	250	211	84	55-130	
2,4,6-Trichlorophenol	ug/L	<10.5	250	219	88	56-130	
2,4-Dinitrotoluene	ug/L	<10	250	227	91	69-130	
2-Methylphenol(o-Cresol)	ug/L	<9.6	250	176	71	40-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<12.8	250	163	65	35-130	
Hexachloro-1,3-butadiene	ug/L	<18.2	250	173	69	45-130	
Hexachlorobenzene	ug/L	<5.7	250	220	88	70-130	
Hexachloroethane	ug/L	<14.8	250	135	54	34-130	
Nitrobenzene	ug/L	<10.3	250	217	87	62-130	
Pentachlorophenol	ug/L	<7.5	250	218	87	28-138	
Pyridine	ug/L	<14.6	250	84.3	34	10-130	
2,4,6-Tribromophenol (S)	%				68	42-140	
2-Fluorobiphenyl (S)	%				69	41-130	
Nitrobenzene-d5 (S)	%				69	43-130	
Phenol-d6 (S)	%				27	15-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239424 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 1277470001, 1277470002, 1277470003, 1277470004

SAMPLE DUPLICATE: 1418315

Parameter	Units	40140178007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.2	16.2	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239428 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 1277470005, 1277470006, 1277470007, 1277470008, 1277470009, 1277470010, 1277470011, 1277470012, 1277470013, 1277470014, 1277470015, 1277470016, 1277470017, 1277470018, 1277470019, 1277470020

SAMPLE DUPLICATE: 1418353

Parameter	Units	40140744001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.9	7.7	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239492 Analysis Method: EPA 1010
QC Batch Method: EPA 1010 Analysis Description: 1010 Flash Point, Closed Cup
Associated Lab Samples: 1277470018, 1277470019, 1277470020

LABORATORY CONTROL SAMPLE: 1418734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Flashpoint	deg F		82.1			

LABORATORY CONTROL SAMPLE: 1418747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Flashpoint	deg F		80.5			

SAMPLE DUPLICATE: 1418794

Parameter	Units	10367500001 Result	Dup Result	RPD	Max RPD	Qualifiers
Flashpoint	deg F	73.5	73.5			

SAMPLE DUPLICATE: 1419180

Parameter	Units	40140710001 Result	Dup Result	RPD	Max RPD	Qualifiers
Flashpoint	deg F	126	128			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239554 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: 9045 pH
Associated Lab Samples: 1277470018, 1277470019, 1277470020

SAMPLE DUPLICATE: 1419151

Parameter	Units	40140812001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.56	7.64	1	5	H6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WWTP Soil
Pace Project No.: 1277470

QC Batch: 239613 Analysis Method: EPA 9095
QC Batch Method: EPA 9095 Analysis Description: 9095 PAINT FILTER LIQUID TEST
Associated Lab Samples: 1277470018, 1277470019, 1277470020

SAMPLE DUPLICATE: 1419458

Parameter	Units	40140592001 Result	Dup Result	RPD	Max RPD	Qualifiers
Free Liquids	no units	Fail	Fail			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WWTP Soil
Pace Project No.: 1277470

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

WORKORDER QUALIFIERS

WO: 1277470

[1] Alkalinity and acidity for required on WWTP18, WWTP20 and WWTP21 due to the pH being between 4 and 10.

SAMPLE QUALIFIERS

Sample: 1277470001

[1] Sample container used for ZHE had headspace

Sample: 1277470002

[1] Sample container used for ZHE had headspace

Sample: 1277470003

[1] Sample container used for ZHE had headspace

Sample: 1277470004

[1] Sample container used for ZHE had headspace

Sample: 1277470005

[1] Sample container used for ZHE had headspace

Sample: 1277470006

[1] Sample container used for ZHE had headspace

Sample: 1277470007

[1] Sample container used for ZHE had headspace

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QUALIFIERS

Project: WWTP Soil
Pace Project No.: 1277470

SAMPLE QUALIFIERS

Sample: 1277470008
[1] Sample container used for ZHE had headspace
Sample: 1277470009
[1] Sample container used for ZHE had headspace
Sample: 1277470010
[1] Sample container used for ZHE had headspace
Sample: 1277470011
[1] Sample container used for ZHE had headspace
Sample: 1277470012
[1] Sample container used for ZHE had headspace
Sample: 1277470013
[1] Sample container used for ZHE had headspace
Sample: 1277470014
[1] Sample container used for ZHE had headspace
Sample: 1277470015
[1] Sample container used for ZHE had headspace
Sample: 1277470016
[1] Sample container used for ZHE had headspace
Sample: 1277470017
[1] Sample container used for ZHE had headspace
Sample: 1277470018
[1] Sample container used for ZHE had headspace
Sample: 1277470019
[1] Sample container used for ZHE had headspace
Sample: 1277470020
[1] Sample container used for ZHE had headspace

ANALYTE QUALIFIERS

1V	Results are from sample aliquot taken from a jar with head space and preserved with MeOH in the laboratory.
H6	Analysis initiated outside of the 15 minute EPA required holding time.
P4	Sample field preservation does not meet EPA or method recommendations for this analysis.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WWTP Soil
Pace Project No.: 1277470

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1277470001	WWTP 1	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470002	WWTP 2	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470003	WWTP 3	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470004	WWTP 4	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470005	WWTP 5	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470006	WWTP 6	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470007	WWTP 7	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470008	WWTP 8	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470009	WWTP 9	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470010	WWTP 10	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470011	WWTP 11	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470012	WWTP 12	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470013	WWTP 13	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470014	WWTP 14	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470015	WWTP 15	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470016	WWTP 16	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470017	WWTP 17	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470018	WWTP 18	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470019	WWTP 19	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470020	WWTP 20	TPH GRO/PVOC WI ext.	238980	WI MOD GRO	238981
1277470018	WWTP 18	EPA 3010	239232	EPA 6010	239345
1277470019	WWTP 19	EPA 3010	239232	EPA 6010	239345
1277470020	WWTP 20	EPA 3010	239232	EPA 6010	239345
1277470001	WWTP 1	EPA 3546	239616	EPA 8270 by SIM	239639
1277470002	WWTP 2	EPA 3546	239617	EPA 8270 by SIM	239665
1277470003	WWTP 3	EPA 3546	239617	EPA 8270 by SIM	239665
1277470004	WWTP 4	EPA 3546	239617	EPA 8270 by SIM	239665
1277470005	WWTP 5	EPA 3546	239617	EPA 8270 by SIM	239665
1277470006	WWTP 6	EPA 3546	239617	EPA 8270 by SIM	239665
1277470007	WWTP 7	EPA 3546	239617	EPA 8270 by SIM	239665
1277470008	WWTP 8	EPA 3546	239617	EPA 8270 by SIM	239665
1277470009	WWTP 9	EPA 3546	239617	EPA 8270 by SIM	239665
1277470010	WWTP 10	EPA 3546	239617	EPA 8270 by SIM	239665
1277470011	WWTP 11	EPA 3546	239617	EPA 8270 by SIM	239665
1277470012	WWTP 12	EPA 3546	239617	EPA 8270 by SIM	239665
1277470013	WWTP 13	EPA 3546	239617	EPA 8270 by SIM	239665
1277470014	WWTP 14	EPA 3546	239617	EPA 8270 by SIM	239665
1277470015	WWTP 15	EPA 3546	239617	EPA 8270 by SIM	239665
1277470016	WWTP 16	EPA 3546	239617	EPA 8270 by SIM	239665
1277470017	WWTP 17	EPA 3546	239617	EPA 8270 by SIM	239665
1277470018	WWTP 18	EPA 3546	239617	EPA 8270 by SIM	239665
1277470019	WWTP 19	EPA 3546	239617	EPA 8270 by SIM	239665
1277470020	WWTP 20	EPA 3546	239617	EPA 8270 by SIM	239665
1277470001	WWTP 1	EPA 3510	239603	EPA 8270	239659
1277470002	WWTP 2	EPA 3510	239603	EPA 8270	239659
1277470003	WWTP 3	EPA 3510	239603	EPA 8270	239659
1277470004	WWTP 4	EPA 3510	239603	EPA 8270	239659

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
4730 Oneota Street
Duluth, MN 55807
(218) 727-6380

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WWTP Soil
Pace Project No.: 1277470

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1277470005	WWTP 5	EPA 3510	239603	EPA 8270	239659
1277470006	WWTP 6	EPA 3510	239868	EPA 8270	239975
1277470007	WWTP 7	EPA 3510	239868	EPA 8270	239975
1277470008	WWTP 8	EPA 3510	239868	EPA 8270	239975
1277470009	WWTP 9	EPA 3510	239868	EPA 8270	239975
1277470010	WWTP 10	EPA 3510	239868	EPA 8270	239975
1277470011	WWTP 11	EPA 3510	239868	EPA 8270	239975
1277470012	WWTP 12	EPA 3510	239868	EPA 8270	239975
1277470013	WWTP 13	EPA 3510	239868	EPA 8270	239975
1277470014	WWTP 14	EPA 3510	239868	EPA 8270	239975
1277470015	WWTP 15	EPA 3510	239868	EPA 8270	239975
1277470016	WWTP 16	EPA 3510	239868	EPA 8270	239975
1277470017	WWTP 17	EPA 3510	239868	EPA 8270	239975
1277470018	WWTP 18	EPA 3510	239159	EPA 8270	239275
1277470019	WWTP 19	EPA 3510	239159	EPA 8270	239275
1277470020	WWTP 20	EPA 3510	239159	EPA 8270	239275
1277470001	WWTP 1	EPA 8260	239311		
1277470002	WWTP 2	EPA 8260	239311		
1277470003	WWTP 3	EPA 8260	239311		
1277470004	WWTP 4	EPA 8260	239311		
1277470005	WWTP 5	EPA 8260	239311		
1277470006	WWTP 6	EPA 8260	239479		
1277470007	WWTP 7	EPA 8260	239479		
1277470008	WWTP 8	EPA 8260	239479		
1277470009	WWTP 9	EPA 8260	239479		
1277470010	WWTP 10	EPA 8260	239479		
1277470011	WWTP 11	EPA 8260	239479		
1277470012	WWTP 12	EPA 8260	239479		
1277470013	WWTP 13	EPA 8260	239479		
1277470014	WWTP 14	EPA 8260	239479		
1277470015	WWTP 15	EPA 8260	239179		
1277470016	WWTP 16	EPA 8260	239179		
1277470017	WWTP 17	EPA 8260	239179		
1277470018	WWTP 18	EPA 8260	239179		
1277470019	WWTP 19	EPA 8260	239179		
1277470020	WWTP 20	EPA 8260	239179		
1277470001	WWTP 1	ASTM D2974-87	239424		
1277470002	WWTP 2	ASTM D2974-87	239424		
1277470003	WWTP 3	ASTM D2974-87	239424		
1277470004	WWTP 4	ASTM D2974-87	239424		
1277470005	WWTP 5	ASTM D2974-87	239428		
1277470006	WWTP 6	ASTM D2974-87	239428		
1277470007	WWTP 7	ASTM D2974-87	239428		
1277470008	WWTP 8	ASTM D2974-87	239428		
1277470009	WWTP 9	ASTM D2974-87	239428		

Pace Analytical Services, LLC
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Duluth, MN 55807
(218) 727-6380

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WWTP Soil
Pace Project No.: 1277470

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1277470010	WWTP 10	ASTM D2974-87	239428		
1277470011	WWTP 11	ASTM D2974-87	239428		
1277470012	WWTP 12	ASTM D2974-87	239428		
1277470013	WWTP 13	ASTM D2974-87	239428		
1277470014	WWTP 14	ASTM D2974-87	239428		
1277470015	WWTP 15	ASTM D2974-87	239428		
1277470016	WWTP 16	ASTM D2974-87	239428		
1277470017	WWTP 17	ASTM D2974-87	239428		
1277470018	WWTP 18	ASTM D2974-87	239428		
1277470019	WWTP 19	ASTM D2974-87	239428		
1277470020	WWTP 20	ASTM D2974-87	239428		
1277470018	WWTP 18	EPA 1010	239492		
1277470019	WWTP 19	EPA 1010	239492		
1277470020	WWTP 20	EPA 1010	239492		
1277470018	WWTP 18	EPA 9045	239554		
1277470019	WWTP 19	EPA 9045	239554		
1277470020	WWTP 20	EPA 9045	239554		
1277470018	WWTP 18	EPA 9095	239613		
1277470019	WWTP 19	EPA 9095	239613		
1277470020	WWTP 20	EPA 9095	239613		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Docu

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be c

WO#: 1277470

PM: LMF Due Date: 11/03/16

CLIENT: 13_SUPERIOR

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: City of Superior	Report To: Ada Tse	Attention:	
Address: 51 E 1st Street	Copy To:	Company Name:	Regulatory Agency
Superior, WI 54880		Address:	
Email: tsea@ci.superior.wi.us	Purchase Order #:	Pace Quote:	
Phone: 715-394-0392 ex. 1018 Fax:	Project Name: WWTP soil	Pace Project Manager: laura.flood@pacelabs.com,	State / Location
Requested Due Date:	Project #:	Pace Profile #:	WI

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	DRO by WIDRO (X)	TCLP VOC	TCLP-SVOC	PAH 8270 by SIM	Residual Chlorine (Y/N)	
1	WWTP 1	SL	G	10.19	1:30				4										1	1	1	1		001
2	WWTP 2				1:40																			002
3	WWTP 3				1:43																			003
4	WWTP 4				1:45																			004
5	WWTP 5				1:50																			005
6	WWTP 6				1:54																			006
7	WWTP 7				1:57																			007
8	WWTP 8				2:02																			008
9	WWTP 9				2:07																			009
10	WWTP 10				2:22																			010
11	WWTP 11				2:25																			011
12	WWTP 12				2:30																			012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
(X) change to GRO at client request LMF	Ada	10/20/16	9:02	Kaggy E Nelson	10/20/16	9:00	6.4	N	N	Y

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Ada Tse						
SIGNATURE of SAMPLER: Ada Tse	DATE Signed: 10-19-2016					

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Docume

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be comp

WO#: 1277470

PM: LMF **Due Date: 11/03/16**

CLIENT: 13_SUPERIOR

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: City of Superior	Report To: Ada Tse	Attention:
Address: 51 E 1st Street	Copy To:	Company Name:
Superior, WI 54880		Address:
Email: tsea@ci.superior.wi.us	Purchase Order #: 101986	Pace Quote:
Phone: 715-394-0392 ex. 1018 Fax:	Project Name: WWTP soil	Pace Project Manager: laura.flood@pacelabs.com,
Requested Due Date:	Project #:	Pace Profile #:

Regulatory Agency:

State / Location: WI

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N)	DRO by WIDRO	TCLP VOC	TCLP-SVOC	PAH 8270 by SIM					Residual Chlorine (Y/N)	
1	WWTP 13	SL	G	10.19	2:38				4										1	1	1	1						013
2	WWTP 14				2:40																							014
3	WWTP 15				2:50																							015
4	WWTP 16				2:47																							016
5	WWTP 17				2:56																							017
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ada Tse	10-20	0:00	Peggy L Klanke	10/20/16	9:00	6.4	N	N	Y

SAMPLER NAME AND SIGNATURE				
PRINT Name of SAMPLER: Ada Tse				
SIGNATURE of SAMPLER:	DATE Signed: 10-20-2016	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields

WO# : 1277470

PM: LMF **Due Date: 11/03/16**

CLIENT: 13_SUPERIOR

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: City of Superior	Report To: Ada Tse	Attention:	
Address: 51 E 1st Street	Copy To:	Company Name:	Regulatory Agency
Superior, WI 54880		Address:	
Email: tsea@ci.superior.wi.us	Purchase Order #: 101986	Pace Quote:	
Phone: 715-394-0392 ex. 1018 Fax:	Project Name: soil	Pace Project Manager: laura.flood@pacelabs.com,	State / Location
Requested Due Date:	Project #.	Pace Profile #.	WI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	pH	Total Solids	Free Liquids	Acidity (mg/L)	Alkalinity (mg/L)	Flash Point	TCLP Lead	TCLP VOC (includes Benzer	DRO by WIDRO (X)	TCLP SVOC	PAH 8270 by SIM	Residual Chlorine (Y/N)	
1	WWTP 18	SL	G	10.19	3:04				11										X	X	X	X	X	X	X	X	X	X	018
2	WWTP 19	SL	G	"	3:15				11										X	X	X	X	X	X	X	X	X	X	019
3	WWTP 20	SL	G	"	3:25				11										X	X	X	X	X	X	X	X	X	X	020
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
(1) Changes to GRO at client request LMF	Ada Tse	10-20-16	9:00	Peggy Edmondson	10/20/16	9:00

SAMPLE CONDITIONS			
TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
4.8	N	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ada

SIGNATURE of SAMPLER: [signature] DATE Signed:

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 22Jan2016 Page 1 of 1
	Document No.: F-DUL-C-001-Rev.01	Issuing Authority: Pace Virginia, Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: City of Superior

Project #: **WO# : 1277470**

1277470

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number:

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other: Temp Blank? ☒ Yes ☐ No 1 cooler (6.4)

Thermometer Used: ☒ B00051 7.0 ped Type of Ice: ☐ Wet ☐ Blue ☒ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read °C: 7.2 Cooler Temp Corrected °C: 6.4 Biological Tissue Frozen? ☐ Yes ☐ No ☐ NA

Temp should be above freezing to 6°C Correction Factor: -0.6 C Date and Initials of Person Examining Contents: ped 10/20/16 0900

Temp → 6.0°C - AP 10-20-16 Comments:

Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1. 3 - COCs
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11. Note if sediment is visible in the dissolved containers.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	12.
-Includes Date/Time/ID/Analysis Matrix: SO				
All containers needing acid/base preservation will be checked and documented in the pH logbook.	☐ Yes	☐ No	☒ N/A	See pH log for results and additional preservation documentation
Headspace in Methyl Mercury Container	☐ Yes	☐ No	☒ N/A	13.
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Present?	☐ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: called Ada tse Date/Time: 10-20-16 3:02 pm

Comments/Resolution: clarified Sample times - all pm - AP 10-20-16

FECAL WAIVER ON FILE Y N TEMPERATURE WAIVER ON FILE (Y) N AP 10-20-16

Project Manager Review: AP for LMF **Date:** 10-20-16

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)